

BOOK II

THE EVOLUTION OF VICTORIAN AND EARLY TWENTIETH
CENTURY OFFICE BUILDINGS IN BRITAIN

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ABBREVIATIONS

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<u>A</u>	<u>Architect</u>
AA	Architectural Association
<u>ABJ</u>	<u>Architects' and Builders' Journal</u>
<u>AJ</u>	<u>Architects' Journal</u>
<u>AR</u>	<u>Architectural Review</u>
<u>B</u>	<u>The Builder</u>
<u>BA</u>	<u>British Architect</u>
<u>BJ</u>	<u>Builders' Journal</u>
<u>BJAE</u>	<u>Builders' Journal and Architectural Engineer</u>
<u>BJAR</u>	<u>Builders' Journal and Architectural Record</u>
<u>BN</u>	<u>Building News</u>
<u>BOM</u>	<u>Business Organisation and Management</u>
<u>CEAJ</u>	<u>Civil Engineers' and Architects' Journal</u>
<u>CCE</u>	<u>Concrete and Constructional Engineering</u>
cf/hr	cubic feet per hour
COCo	City Offices Co.
cu. ft.	cubic feet
EBL	Edinburgh Buildings List
GE	Goad's Maps, Edinburgh
GG	Goad's Maps, Glasgow
GL	Goad's Maps, London
GLP	Goad's Maps, Liverpool
GMC	Goad's Maps, Manchester
<u>HVER</u>	<u>Heating and Ventilating Engineers Report</u>
ICE	Institute of Civil Engineers
<u>JSAH</u>	<u>Journal Society of Architectural Historians</u>
LBA	London Building Act
LCC	London County Council

MB	Midland Bank Archive
MBA	Metropolitan Building Act
MDMB	Mersey Docks and Harbour Board Records
n.c.	no city
n.d.	no date
n.p.	no publisher
n.p.	unpaginated
NWB	National Westminster Bank Archive
PAC	Phoenix Assurance Co. Archive
<u>PICE</u>	<u>Institute of Civil Engineers Proceedings</u>
RIBA	Royal Institute of British Architects
<u>RIBAJ</u>	<u>Royal Institute of British Architects Journal</u>
<u>RIBAP</u>	<u>Royal Institute of British Architects Proceedings</u>
<u>RIBAT</u>	<u>Royal Institute of British Architects Transactions</u>
<u>SAJ</u>	<u>Society of Architects' Journal</u>
sf	square feet
<u>SIT</u>	<u>Surveyors' Institute Transactions</u>
<u>TC</u>	<u>Trollope and Colls Building Records</u>

NOTES

Notes to Chapter 1.

INTRODUCTION

1. Banham, R., Architecture of the Well Tempered Environment, 1969.
2. Bruegmann, R., Central heating and forced ventilation, JSAH, Oct. 1978.
3. Guedes, P., ed., Encyclopedia of Architecture and Technological Change, 1979. Guedes's attention to British office building developments defers to American developments.
4. Summerson, J., The Victorian rebuilding of the City of London, The London Journal, vol.3 no.2, 1977. Girouard, M., Sweetness and Light, 1977, 44.
5. BN, 5 Sept. 1873, 252.
6. The building was not built according to the section drawing now in the RIBA Drawings Collection.
7. Summerson, op. cit.
8. Attoe, W., Architecture and Critical Imagination, 1978, 34.
9. Ibid., 33.
10. Offices were regular features in the architectural press, but interest was generally limited to aspects of style.
11. John Belcher's decision to leave the 'City practice' established by his father is the most obvious example of this.
12. Banham, op. cit., 15.
13. Eaton, L., American Architecture Comes of Age, 1972, ch.2.
14. Duffy, F., Cave, C., and Worthington, J., Planning Office Space, 1976, 16-17.
15. Hughes, F., By Hand and Brain, 1953, 10, provided much of this list.
16. A New Survey of London Life and Labour, 1934, vol.8, 273.
17. Pevsner, N., A History of Building Types, 1976, ch.12 & 13.
18. Taylor, N., Monuments of Commerce, 1968.
19. Hitchcock, H-R., Victorian monuments of commerce, AR, Feb. 1949.
20. Hitchcock, H-R., Architecture: Nineteenth and Twentieth Centuries, 1958.
21. Guedes, op. cit., 106-109, 114-116.
22. I'Anson, E., Some notice of office buildings in the City of London, RIBAT, 1864/65, 25-36.
23. I'Anson in 1886-1888, Whichcord in 1879-1881, Anderson in 1892-1893.
24. RIBAJ, 12 July 1917, 239.
25. Giedion in Space, Time and Architecture is the most vigorous proponent of this theory.
26. Hitchcock, Victorian monuments. Summerson, op. cit.
Taylor, op. cit.
27. Condit, C., The Chicago School of Architecture, 1964.
28. Particularly by Post-Modern theorists and critics of post-war modern housing.
29. Saint, A., Richard Norman Shaw, 1976.
30. Watkin, D., Life and Work of C. R. Cockwell, 1974.
31. Fiddes, V. and Rowan, A., David Bryce, 1976.
32. - Fawcett, J., ed., Seven Victorian Architects, 1976.
33. Muthesius, S., The High Victorian Movement in Architecture 1850-1870, 1972.

34. Curl, J.S., Victorian Architecture: Its Practical Aspects, 1973.
35. Girouard, M., op. cit.
36. Bassett, D., The French Renaissance Revival in British Architecture 1824-1914, 1979.
37. Service, A., Edwardian Architecture, 1977.
38. Service, A., ed., Edwardian Architecture and Its Origins, 1975.
39. Service, A., London 1900, 1979.
40. Macleod, R., Style and Society, 1971.
41. Crawford, D., The City of London and its Architectural Heritage, 1976.
42. Hansen, M., Famous Architects of the City of London, 1971.
43. Hughes, J.Q., Seaport: Architecture and Townscape in Liverpool, 1964.
44. Gomme, A. and Walker, D., Architecture of Glasgow, 1968.
45. Gomme, A., Jenner, M., and Little, B., Bristol, An Architectural History, 1979.
46. Summerson, J., The Turn of the Century, 1976.
47. Summerson, Victorian rebuilding.
48. Summerson, J., London the artifact, in Dyes, H.J. and Wolf, M., eds., The Victorian City, 1973, vol.1, 311.
49. Stamp, G., London 1900, 1978.
50. Stewart, C., Stones of Manchester, 1956.
51. Pevsner, op. cit.
52. Guedes, op. cit.
53. Hitchcock, Victorian monuments.
54. Taylor, op. cit.
55. Hitchcock, H-R., Early Victorian Architecture in Britain, 1954.
56. Hitchcock, Architecture: Centuries.
57. Singer, C., History of Technology, 1958.
58. Cowan, H.J., An Historical Outline of Architectural Science, 1966.
59. Rolt, L.T.C., Victorian Engineering, 1970.
60. Wright, L., Home Fires Burning, 1964.
61. O'Dea, W.T., The Social History of Lighting, 1938.
62. Giedion, S., Mechanisation Takes Command, 1948.
63. Giedion, S., Space, Time and Architecture, 1973.
64. Banham, op. cit.
65. Brueggmann, op. cit.
66. Guedes, op. cit.
67. Anderson, G., Victorian Clerks, 1976.
68. Green, S.C., Insanitary Offices, The Clerk, 1908, 83.
69. The efforts were to get offices included in the 1901 Factory and Workshop Act on the grounds that 'typewriting' was a mechanical process.
70. See bibliography for listing.
71. Gilbart, J.W., Elements of Banking, 1852.
72. Gregory, op. cit., 2.
73. The average number of clerks in Liverpool's 4,000 offices in 1871 was probably four, *ibid.*, 10.
74. See bibliography for archives consulted.
75. Rayner, O.P., The Typewriter Girl, 1897.
76. Armstrong, T., King Cotton, 1962.
77. Harper, R., The Evolution of English Building Regulations 1840-1914, 1978.

Notes to Chapter 2.

VICTORIAN FORM:
RESPONSE TO FORCES

1. I'Anson, E., Some notice of office buildings in the City of London, RIBAT, 1864/65, 25-36.
2. Interview with Ray Tye, Archivist, Phoenix Assurance Co. Ltd.
3. CEAJ, July 1840, 255.
4. B, 29 Apr. 1843, 171.
5. B, 31 Aug. 1844, 437.
6. I'Anson noted the date to be 1842. The 1844 date is substantiated by plans in Magdalene College Archive.
7. Magdalene College Archive, Drawing No. 34.
8. Magdalene College Archive, Drawing No. 30.
9. GL, 1888.
10. GL, 1888.
11. Checkland, S.G., The Rise of the Industrial Society in England 1815-1841, 1964.
12. Ibid., 196.
13. Gregory, T.E., The Westminster Bank Through a Century, 1936, vol.1, 123.
14. Ibid., vol.1, 97.
15. His role is unclear.
16. Pevsner, N., A History of Building Types, 1976, 200.
17. Account of Head Office of Westminster Bank, 1930, 6.
18. Ibid., 5.
19. Checkland, op. cit., 107.
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I'Anson, op. cit.
21. I'Anson, E., London: its commercial centres and their influence on the value of land, SIT, vol.III, 1870-71, 333-366.
22. See, for example, Summerson, J., Georgian London, 1962, and Hobhouse, H., Thomas Cubitt, Master Builder, 1971.
23. Magdalene College Archive, Register of Estates.
24. Worshipful Company of Skinners Archive, Property Books.
25. COCo.
26. B, 3 Mar. 1855, 97.
27. Ibid., 97.
28. B, 3 Feb. 1872, 80.
29. I'Anson, Some notice.
30. B, 17 Sept. 1864, 678. B, 1 Oct. 1864, 713.
31. B, 26 Jan. 1878, 77.
32. B, 28 Nov. 1885, 747. B, 14 July 1883, 42.
33. I'Anson, Some notice.
34. B, 26 Jan. 1878, 77.
35. Ibid., 77.
36. B, 17 Sept. 1864, 678.
37. Gwilt, J., Encyclopaedia of Architecture, 1899, 1195+.
38. These points are succinctly discussed in Fletcher, B., Light and Air, 1879.
39. Ibid.

40. His interests are perhaps best expressed by the fact that he was president of the RIBA and the Surveyors Institution simultaneously.
41. B, 4 June 1881, 694.
42. Ibid, 694. A practice arose, however, to erect temporary scaffolding with a canvas enclosure to predict light diminution.
43. RIBAT, 1850/53, 1-4, appendix 1-4.
44. RIBAT, 1869/70, 160-170. B, 16 July 1870, 561.
45. Fletcher, op. cit. See also review in B, 21 June 1879, 678-679.
46. B, 4 June 1881, 694-695. RIBAT, 1865/66, 154-163.
47. B, 22 Jan. 1876, 74.
48. B, 22 May 1881, 650. The 1862 Act restricted the height of buildings on new streets to less than the width of the street. There was no reference to 'Ancient Lights' in the Act.
49. B, 4 June 1881, 694.
50. Ibid., 694.
51. B, 18 May 1878, 508.
52. B, 3 Feb. 1877, 111-114.
53. Ibid., 111-114.
54. B, 9 Mar. 1867, 173.
55. See, for example, Taylor, N., Monuments of Commerce, 1968, pl.29.
56. B, 15 Sept. 1866, 679.
57. B, 1 Sept. 1866, 642.
58. The last storey was built later, perhaps after the dominant owner's property was rebuilt. The date and circumstance are uncertain.
59. NWB.
60. Royal Insurance Archive, Lombard Street Property Book.
61. B, 23 Dec. 1865, 901.
62. Gilbert wrote profusely. Some of his works are listed in the bibliography.
63. Gregory, op. cit., vol.1, 204.
64. B, 22 Dec. 1849, 608-609.
65. Gilbert, J.W., Elements of Banking, 1852, 21.
66. Ibid., 21-22.
67. Gilbert, J.W., History Principles and Practice of Banking, 1882, 6.
68. Ibid., 5.
69. Anderson, G., Victorian Clerks, 1976, 16.
70. B, 14 Nov. 1885, 701.
71. B, 23 Dec. 1865, 909.
72. B, 18 June 1853, 392.
73. Bankers' Magazine, vol.XV, May 1853, 99. Gilbert offered the prize. Granville Sharp wrote the essay.
74. Ibid., 99. The previous branch on this site was converted from a house by Tite in 1838. It had a 'ceiling about ten feet high - gas burning all day - dirt, darkness, and discomfort everywhere.'
75. The basis for this reconstruction is the location of manager's office, which required direct public access.
76. Campin, F., Constructional Iron and Steel Work, 1896, 133.

77. B, 24 Feb. 1866, 136.
78. Both shops and banks typically employed corner entries.
79. B, 31 Oct. 1885, 621.
80. B, 14 Nov. 1885, 701.
81. The Actuarial Magazine, perhaps the most likely source for discussions of insurance office planning, contained no such articles during this period. See Index, Institute of Actuaries Journal, 1883, vol.1-20.
82. For a description of Cockerell's internal arrangement see Dickson, P.G.M., The Sun Insurance Office, 1960, 114. Unfortunately no plans seem to exist.
83. Anderson, op. cit., 10. There seems to be no comparable statistic for London.
84. I'Anson, Some notice.
85. B, 11 Sept. 1847, 433.
86. B, 16 Aug. 1851, 513.
87. I'Anson, Some notice.
88. B, 20 Dec. 1856, 691.
89. I'Anson, Some notice.
90. Hesketh, R., On the admission of daylight into buildings, RIBAT, 1851/52, 1-6.
91. BN, 8 Mar. 1878, 232-233.
92. B, 15 Dec. 1866, 920.
93. Knight, S., The influence of business requirements upon street architecture, RIBAT, 1876/77, 15-32.
94. St. Clements House had twenty-three foot deep spaces. 37-39 Lombard Street had twenty-one foot deep spaces. COCo. GL, 1888.
95. Cruickshank, D. and Wyld, P., London: The Art of Georgian Building, 1975, 34.
96. I'Anson, Some notice.
97. Kerr, R., The Gentleman's House, 1865, 124.
98. In the early years after the Elementary Education Act of 1870 authorities disagreed on the best direction of lighting. See B, 23 Aug. 1879, 930. B, 30 Aug. 1879, 958.
99. B, 28 Feb. 1857, 118.
100. An implicit height was established by the wall thickness schedule, which terminated at 100 feet. Hankey's Queen Anne Mansions later proved this to be no absolute limit.
101. I'Anson, Some notice.
102. This judgment based on survey of buildings published in B and BN through 1880 and Goad's Maps of the City.
103. F. Adams Smith, for example, was careful to locate the office entry 'quite distinct from the shops' in his building on New Broad Street. BN, 29 Jan. 1886, 176.
104. Muthesius, S., The High Victorian Movement in Architecture, 1972, 193.
105. Gregory, op. cit., vol.1, 290. The architect is uncertain, but it was likely to have been Tite, who was on the bank's board.
106. GL, 1888.
107. Ibid.
108. B, 5 July 1862, 478. GL, 1888.
109. The issue was most pronounced in the early days of compulsory education. See B, 30 Aug. 1879, 958.
110. A, 3 Feb. 1877, 78.

111. Summerson, J., The Victorian rebuilding of the City of London, The London Journal, vol.3 no.2, 1977.
112. A, 3 Feb. 1877, 78.
113. BN, 17 Jan. 1868, 44.
114. B, 23 Aug. 1862, 605.
115. B, 30 June 1883, 901.
116. The author has found none.
117. B, 16 Apr. 1887, 565.
118. B, 28 June 1879, 710.
119. B, 13 Feb. 1875, 145.
120. B, 23 Dec. 1848, 619.
121. I'Anson, Some notice.
122. Knight, Influence of business.
123. A, 3 Feb. 1877, 78.
124. I'Anson, Some notice.
125. Ibid.
126. Saint, A., Richard Norman Shaw, 1977, 134.
127. B, 20 Nov. 1858, 784.
128. The section indicates building modifications made to allow the bank more first floor space, thus diminishing ground floor lighting levels.
129. B, 19 Feb. 1853, 113.
130. BN, 5 Sept. 1873, 252.
131. I'Anson on Colonial Chambers, Fenchurch Street. Whichcord on 9 Mincing Lane. See also BN, 22 Oct. 1880, 464-465.
132. Ellis and Son, Advertising circular for 9 Mincing Lane, City, 186-.
133. A, 3 Feb. 1877, 78.
134. These were not indicated on the section.
135. Whichcord, J., National Safe Deposit Co. premises, RIBAT, 1875/76, 87-102.
136. Judgment based on a review of Goad's Maps.
137. 'Stack' was a contemporary term. It probably was synonymous with 'pile': a tall building.
138. B, 23 June 1883, 863.
139. B, 27 Jan. 1883, 106. B, 2 June 1883, 753.
140. The open well acted as a flue in a fire.
141. Plans in British and Foreign Bible Society Archive.
142. The Victorian ratio is based on the floor area of all floors divided by the site area. The World War Two figure is based on the total area of building within street blocks, divided by the street block area. Holden, C.H. and Holford, W.G., The City of London, 1951, 272.
143. B, 27 Jan. 1883, 106. B, 2 June 1883, 753.
144. B, 27 Mar. 1858, 216.
145. This building was attributed to Whichcord in the RIBA Biographic File.
146. B, 1 July 1871, 507.
147. Condit, C., The Chicago School, 1964, 56.
148. I'Anson, Some notice.
149. Summerson, op. cit.

150. This estimate of date is based on the profile of Winchester House, built in 1887 (B, 25 June 1887, 956) across the street from Great Winchester Street Buildings. The profile indicates a probable 'Ancient Lights' settlement. Allowing for a twenty year period to establish rights, Great Winchester Street Buildings would have had to be built before 1867.
151. It was built before John Gibson's National Provincial Bank.
152. Arthur Asphitel in I'Anson, Some notice.
153. COCo.
154. The Registered Land Company erected a building at 103 Cannon Street. BN, 7 Sept. 1866, 594.
155. Trollope and Colls built many buildings for the CLRPCo.
156. COCo, General Meeting Minutes, 2 Apr. 1864.
157. Ibid.
158. The boast must have overlooked Gresham House.
159. COCo, General Meeting Minutes, 23 Dec. 1864.
160. The Francis brothers' offices were moved around within the building, always occupying space the company had difficulty letting.
161. COCo, General Meeting Minutes, 22 Mar. 1866.
162. BN, 22 Feb. 1867, 142.
163. The areas might align, due to the common sizing of office spaces, but they were often by fire walls.
164. BN, 22 Feb. 1867, 142.
165. COCo, General Meeting Minutes, 8 Mar. 1890.
166. COCo, General Meeting Minutes, 30 June 1873.
167. A, 3 Feb. 1877, 78.
168. As outlined, for example, by Gwilt and Fergusson.
169. This attitude was even expressed regarding facades. BN, 1 Feb. 1895, 150.
170. Hyde, F.E. and Harris, J.R., The Blue Funnel, 1956, 7.
171. B, 16 Mar. 1861, 178.
172. GLP. For a description see BN, 5 June 1857, 583.
173. Hughes, J.Q., Seaport: Architecture and Townscape of Liverpool, 1964, 50-51.
174. B, 30 May 1857, 301. Colling was a London architect.
175. B, 20 Jan. 1866, 40.
176. Armstrong, T., King Cotton, 1962, 113-114.
177. BN, 14 Feb. 1868, 106.
178. B, 4 Dec. 1869, 967.
179. BN, 24 June 1904, 905.
180. GMC.
181. Reilly, C.H., Some Manchester Streets and Their Buildings, 1924, 98.
182. I'Anson, Some notice.
183. GMC,GG.
184. GLP.
185. Hitchcock, H-R., Victorian monuments of commerce, AR, Feb. 1949.
186. B, 7 Nov. 1857, 634.
187. This section does not show the roof light. GLP shows it at the fourth floor.
188. GLP.
189. B, 20 Mar. 1909, 336.
190. B, 6 Apr. 1878, 364.

191. B, 9 Sept. 1899, 232.
192. B, 29 May 1886, 801.
193. B, 14 Mar. 1903, 290.
194. Guedes, P., ed., Encyclopedia of Architecture and Technological Change, 1979, 207.
195. Hitchcock, H-R., Architecture: Nineteenth and Twentieth Centuries, 1958, 239.
196. Guedes, op. cit., 207.
197. Whichcord, J., On hydraulic lifts, RIBAT, 1863/64, 77-90.
198. Hitchcock, Architecture: Centuries, 239.
199. B, 19 Apr. 1884, 563. BN, 18 Apr. 1890, 543.
200. B, 3 Feb. 1866, 92.
201. B, 15 May 1918, 108.
202. B, 30 May 1874, 460.
203. B, 25 Mar. 1876, 305.
204. B, 19 June 1914, 719.
205. Cubitt, H., Building in London, 1911, 288.
206. B, 2 June 1877, 556.
207. B, 9 Mar. 1872, 189.
208. B, 30 May 1874, 460.
209. GL, 1888.
210. COCo, General Meeting Minutes, 30 June 1873.
211. COCo, General Meeting Minutes, 29 Sept. 1882.
212. COCo, General Meeting Minutes, 22 Mar. 1876.
213. COCo, General Meeting Minutes, 26 Feb. 1895.
214. COCo, General Meeting Minutes, 29 Sept. 1882.
215. COCo, General Meeting Minutes, 31 Dec. 1882.
216. COCo, General Meeting Minutes, 25 Mar. 1885.
217. COCo, General Meeting Minutes, 21 Feb. 1899.
218. B, 18 Oct. 1884, 544.
219. Ellington, E.B., Distribution of hydraulic power in London, PICE, 1887/88, 1-85.
220. John Brown got £65 per year for operating the lift in the City Bank Chambers in 1891. Midland Bank Archive, 21 Threadneedle Committee Notes, 27 Jan. 1891.
221. Ravenshaw, H.W., Electric lifts and cranes, PICE, 1896/97, 11-47.
222. Whichcord, op. cit. Ellington, op. cit.
223. B, 25 Dec. 1880, 771.
224. B, 31 Mar. 1888, 233.
225. B, 28 Apr. 1906, 457.
226. B, 15 May 1880, 615.
227. B, 27 Jan. 1883, 106.
228. B, 21 July 1888, 47.
229. B, 23 May 1896, 441.
230. B, 18 Feb. 1888, 128.
231. A, 28 Apr. 1877, 278.
232. B, 11 Feb. 1882, 178.
233. B, 26 July 1884, 118.
234. B, 7 Jan. 1893, 3.
235. B, 18 Feb. 1888, 128.
236. B, 5 May 1888, 317.
237. B, 8 June 1889, 432.
238. B, 21 Dec. 1889, 433.

239. B, 16 Aug. 1890, 127. B, 22 Nov. 1890, 403. See also Harper, R., The Evolution of English Building Regulations, 1978.
240. Cates, A., Review of the London Streets and Buildings Consolidation and Amendment Bill, RIBAJ, 1893/94, 343-359.
241. London Streets and Buildings Bill discussion, RIBAJ, 1893/94, 390-408.
242. B, 24 Mar. 1894, 233.
243. London Streets Bill discussion.
244. B, 24 Mar. 1894, 231-232.
245. B, 24 Mar. 1894, 234.
246. B, 17 Mar. 1894, 214.
247. London Streets Bill discussion.
248. B, 7 Apr. 1894, 270-271.
249. B, 29 Sept. 1894, 217.
250. The 1855 MBA had recognised solicitors' offices, but other distinctions were not clear.
251. B, 29 Sept. 1894, 218.
252. Special Committee on Light and Air, RIBAP, 1881/82, 236-267.
253. B, 15 May 1886, 700.
254. B, 12 Nov. 1887, 686.
255. B, 29 Dec. 1900, 583.
256. Special Committee on Light and Air.
257. RIBAP, 1882/83, 80-84.
258. RIBAP, 1881/82, 268.
259. Ancient Lights, RIBAJ, 1899/1900, 209-236, 300-313.
260. B, 4 June 1881, 695.
261. Ancient Lights.
262. Light and Air, RIBAT, 1888/89, 216-218.
263. Ibid.
264. Ibid.
265. Ancient Lights.
266. Ibid.
267. B, 21 July 1888, 47.
268. GL, 1888.
269. TC.
270. Statham, H.H., Modern Architecture, 1897, 255.
271. Ludgate Hill Committee Notes, 3 Mar. 1891, City Bank, Midland Bank Archive.
272. Booth, C., Life and Labour of the People in London, 1903, series 2 vol.3, 273.
273. Klingender, F.D., The Condition of Clerical Labour in Britain, 1935, 12.
274. TC.
275. BN, 18 Apr. 1890, 543.
276. BN, 5 Oct. 1900, 457.
277. Booth, op. cit., 274.
278. Anderson, op. cit., 56.
279. Middleton, G.A.T., Modern Buildings, 1904-07, vol.II, 32.
280. The Clerk, Feb. 1908, 24.
281. B, 23 May 1896, 447.
282. PAC.
283. Royal Insurance Archive.
284. TC.
285. COCo, General Meeting Minutes, 18 Feb. 1902.
286. Cubitt, op. cit., 287.

287. B, 14 Apr. 1894, 290.
288. B, 23 May 1896, 447.
289. Royal Insurance Co. Archive.
290. B, 27 July 1907, 113.
291. Supple, B., ed., Essays in British Business History, 1977, 80.
292. B, 2 Sept. 1899, 220.
293. B, 11 July 1863, 496.
294. B, 29 Nov. 1873, 945.
295. B, 6 July 1878, 696.
296. B, 31 May 1879, 596.
297. B, 29 Dec. 1883, 856.
298. By The Builder and Building News.
299. B, 27 Jan. 1883, 106. B, 2 June 1883, 753. For a similar building see BN, 22 Oct. 1880, 464-465.
300. COCo, General Meeting Minutes, 21 Mar. 1875.
301. Judgment based on analysis of buildings published in The Builder.
302. Wilson, Mason and Partners, London, architects for the rebuilding.
303. COCo, General Meeting Minutes, 21 Mar. 1875.
304. Boyle's Ventilators were commonly used for public buildings but rarely for offices.
305. B, 30 Apr. 1898, 419.
306. Eckstein, W., Interior lighting, B, 14 May 1898, 465-469.
307. Collins, P., Concrete, 1959, 53.
308. Eckstein, op. cit.
309. B, 20 July 1878, 752.
310. Eckstein, op. cit.
311. BN, 2 Aug. 1895, 142-143.
312. B, 6 Aug. 1881, 172.

Notes to Chapter 3.
VICTORIAN STRUCTURE:
NEW STRUCTURE FOR NEW USES

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14. B, 4 Nov. 1854, 570.
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16. B, 18 June 1870, 477.
17. B, 31 Jan. 1880, 123.
18. B, 13 Feb. 1892, 121.
19. B, 19 Jan. 1856, 33.
20. Liverpool Building Regulations, 1839.
21. Liverpool Building Regulations, 1882.
22. Liverpool Building Regulations, 1889.
23. BN, 21 Sept. 1877, 274.
24. I'Anson makes reference to placing girders under walls, a practice which would not have been necessary with a fire resisting floor. See I'Anson, E., Some notice of office buildings, RIBAT, 1864/65, 25-36.
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26. Asphitel, A. and Whichcord, J., Town Dwellings, 1855, 20.
27. Bartholomew, op. cit., 6.
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31. B, 18 June 1853, 393.
32. Building visit by author.
33. B, 30 May 1857, 301.
34. Hitchcock, op. cit.
35. BN, 10 Feb. 1860, 101.

36. I'Anson, Some notice.
37. British and Foreign Bible Society Archive.
38. BN, 21 Sept. 1877, 274.
39. RIBA Drawings Collection.
40. BN, 21 Sept. 1877, 274. B, 15 Oct. 1864, 755.
41. Burnell, H.H., Descriptions of the French method of constructing iron floors, RIBAT, 1853/54, 36-40.
42. B, 4 June 1853, 356.
43. B, 11 Nov. 1848, 541.
44. B, 15 May 1858, 337.
45. Of the floor systems noted for offices in The Builder, the Fox and Barrett was most common through the 1850's.
46. B, 30 June 1866, 482. B, 14 July 1866, 527.
47. Judgment based on notice of floors in The Builder.
48. BN, 29 Mar. 1872, 250.
49. B, 7 June 1856, 308+.
50. Fairbairn, W., Report on the Construction of Fireproof Buildings, 1844, 9.
51. Fairbairn, W., On the Application of Cast Iron and Wrought Iron to Building Purposes, 1854.
52. The book was published posthumously.
53. Braidwood, op. cit., 57.
54. B, 7 June 1856, 308+.
55. B, 15 June 1878, 612.
56. Lewis, T.H., Fireproof materials and construction, discussion, RIBAT, 1864/65, 109-126.
57. B, 7 June 1856, 308+.
58. BN, 5 July 1861, 557.
59. BN, 31 Aug. 1866, 532.
60. Lewis, op. cit.
61. B, 26 May 1866, 378.
62. Fairbairn, Report on Construction, 51. B, 26 Oct. 1861, 744.
63. BN, 16 Mar. 1889, 363.
64. B, 31 Aug. 1878, 905.
65. B, 15 May 1847, 234.
66. Hosking, op. cit., 125.
67. B, 27 Feb. 1858, 137.
68. BN, 5 July 1861, 557.
69. B, 26 Dec. 1861, 902.
70. Lewis, op. cit.
71. B, 3 June 1871, 417.
72. B, 30 Dec. 1871, 1022.
73. B, 23 Nov. 1872, 919. B, 24 May 1873, 409.
74. B, 13 June 1874, 509. Whichcord, J., National Safe Deposit Co.'s premises, RIBAT, 1875/76, 87-102.
75. BN, 5 June 1874, 627-628.
76. B, 8 June 1878, 585.
77. BN, 30 Mar. 1877, 310.
78. Cates, A., Concrete and fire resisting construction, RIBAT, 1877/78, 296-312.
79. BN, 5 July 1861, 557.
80. Judgment based on a review of systems noted in The Builder.

81. Judgment based on a review of systems noted in The Builder.
82. B, 6 Apr. 1889, 263.
83. B, 30 Apr. 1898, 419.
84. B, 15 Feb., 1845, 77.
85. Burnell, op. cit.
86. B, 6 Apr. 1889, 264.
87. B, 25 Nov. 1893, 399.
88. Burnell, op. cit., discussion.
89. In this building, the beam lines coincide with the pier locations on the front wall.
90. British and Foreign Bible Society Archive.
91. Kingham, Knight and Assoc., architects for the renovation of the building.
92. Wilson, Mason and Partners, architects for the renovation of the building.
93. Building height, for example, was never certain until 'Ancient Lights' claims were settled.
94. Campin, op. cit., 164.

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VICTORIAN SERVICES:
NEW TECHNOLOGIES AND OLD STANDARDS

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2. Parkes, E.A., Manual of Practical Hygiene, 1864, 65.
3. See also Banham, R., Architecture of the Well Tempered Environment, 1969, 41-43.
4. BN, 20 Dec. 1872, 488.
5. Bacon, A.J., Sanitary science in its relation to civil architecture, RIBAT, 1880/81, 105-117.
6. Barry's original system was revised by Reid. Reid's was revised by James Keith in the 1890's.
7. B, 23 Oct. 1858, 715.
8. B, 23 May 1863, 377.
9. B, 23 Oct. 1858, 715.
10. Thackrah, C.T., The Effects of the Arts, 1831, 92.
11. Gilbert, J.W., Elements of Banking, 1852, 22.
12. Thwaite, B.H., Our Factories, 1882, 77.
13. Anderson, G., Victorian Clerks, 1976, 17.
14. I'Anson, E., Some notice of office buildings, RIBAT, 1864/65, 25-36.
15. Keith, J., Report on the Heating and Ventilation of the Houses of Parliament, 1894, 11.
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18. Perkins, A.M., Improved Apparatus, 1840, n.p.
19. County Fire Office, Sun Fire Office, General Credit Co., London Joint Stock Bank, Equitable Assurance.
20. Braidwood, J., Fire Prevention and Fire Extinction, 1866, 43.
21. This was also a problem with closed stoves.
22. Phipson, Wilson W., A Memoir, 1892, 9.
23. B, 14 June 1873, 489. B, 19 Aug. 1871, 651.
24. Liverpool London and Globe in Bristol, B, 4 June 1870, 445. National Provincial in Bristol, B, 6 Aug. 1864, 583. Bury Banking Co., B, 5 June 1869, 444. Leeds and Yorkshire Assurance Co., B, 10 July 1858, 467, for example.
25. BN, 28 Aug. 1857, 905.
26. BN, 4 Feb. 1881, 122.
27. B, 16 Apr. 1887, 565.
28. B, 25 Nov. 1865, 834.
29. B, 26 Nov. 1859, 770.
30. Lewes, V.B., Illuminants and ventilation, RIBAT, 1887/88, 77-88. B, 16 May 1891, 396. B, 26 Nov. 1859, 770.
31. B, 20 Apr. 1872, 307. B, 24 Feb. 1866, 136.
32. B, 15 June 1844, 298.
33. B, 11 Oct. 1873, 812.
34. B, 5 Sept. 1896, 183.
35. Only The Builder took regular notice of heating and ventilation systems.
36. B, 23 July 1881, 121.
37. B, 22 Oct. 1881, 527.
38. B, 25 June 1859, 423.
39. RIBAJ, 1894/95, 315.
40. Interview with building manager.

- 41. B, 26 Nov. 1859, 770.
- 42. Report to the General Board of Health, 1857, 96.
- 43. Galton, D., Construction of Healthy Dwellings, 1880, 124.
- 44. RIBA Drawings Collection.
- 45. TC.
- 46. B, 24 Mar. 1866, 205.
- 47. B, 4 Apr. 1885, 503.

Notes to Chapter 5.
VICTORIAN STYLE:
DESIGN WITHIN CONSTRAINTS

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2. Ibid., 1854 edition, 674-675; 1889 & 1899 editions, 838-839.
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10. BN, 6 June 1864, 857.
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12. B, 3 Feb. 1877, 111+.
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14. Sharp, G., Adaptation of recent inventions to practical banking, Bankers' Magazine, 1852, 3.
15. B, 18 Aug. 1855, 389.
16. BN, 15 Nov. 1861, 910.
17. B, 17 Sept. 1864, 679.
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19. Knight, S.B., The influence of business requirements upon street architecture, RIBAT, 1876/77, 15-32.
20. BN, 1 Feb. 1895, 150-151.
21. Summerson, J., London the artifact, in Dyos, H.J. and Wolf, M., eds., The Victorian City, 1973, vol.1, 311.
22. See, for example, Phoenix Office, 1756, by Robert Taylor.
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23. B, 13 Aug. 1915, 117.
24. CEAJ, July 1840, 255.
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26. B, 3 Aug. 1844, 383. See also Richardson, A.E., Monumental Classic Architecture, 1914, 73.
27. Dixon, R. and Muthesius, S., Victorian Architecture, 1978, 125.
28. Fiddes, V. and Rowan, A., David Bryce, 1976, 18.
29. British Almanac, 1839, 236.
30. Watkin, D., Life and Work of C. R. Cockerell, 1974, 223.
31. B, 11 July 1896, 30.
32. B, 20 Jan. 1866, 41-42.
33. B, 5 Oct. 1872, 786.
34. B, 30 June 1877, 661.
35. BN, 6 Apr. 1883, 438.
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40. B, 4 Nov. 1843, 470.

41. B, 24 Feb. 1866, 129.
42. Hitchcock, H-R., Victorian monuments of commerce, AR, Feb. 1949.
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45. B, 17 July 1914, 69.
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47. Fiddes and Rowan, op. cit., pl.13.
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49. For illustration, see Dixon and Muthesius, op. cit., pl.4.
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51. B, 21 Nov 1846, 555.
52. B, 17 Sept. 1864, 679.
53. BN, 11 Sept. 1875, after 146.
54. B, 22 Oct. 1864, 770.
55. B, 5 June 1869, 447.
56. Knight, op. cit.
57. See, for example, B, 7 Oct. 1848, 486. B, 10 Mar. 1849, 115.
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66. Ibid., 205.
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71. Knight, op. cit.
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73. Knight, op. cit.
74. B, 15 July 1865, 503.
75. A, 1 Apr. 1871, 207.
76. BN, 25 Sept. 1868, 647.
77. B, 25 Nov. 1876, 1141.
78. Knight, op. cit.
79. B, 26 July 1873, 587.
80. B, 22 Oct. 1864, 769.
81. B, 5 Nov. 1870, 886.
82. B, 4 Mar. 1876, 215.
83. BN, 3 Mar. 1871, 165.
84. B, 22 May 1869, 407.
85. BN, 1 Oct. 1869, 259.
86. BN, 31 Aug. 1883, 321.
87. B, 5 Aug. 1876, 753.
88. BN, 14 Feb. 1868, 106.
89. BN, 6 June 1862, 390.
90. BN, 7 Feb. 1868, 90.

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99. BN, 30 Apr. 1880, 514.
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101. B, 25 Nov. 1876, 1140.
102. BN, 25 Sept. 1868, 647. BN, 9 Oct. 1868, 680.
103. BN, 30 Aug. 1901, 271.
104. B, 24 Nov. 1900, 466.
105. B, 10 Nov., 1860, 713.
106. See also Summerson, The Victorian rebuilding.
107. B, 1 May 1880, 538.
108. B, 9 Aug. 1873, 632.
109. Fergusson, J., History of the Modern Styles of Architecture, 1891, 151.
110. Summerson, The Victorian rebuilding.
111. See Saint, A., Richard Norman Shaw, 1976, 136-137, for the issue relative to the MBA window setback requirement. The Belchers' ability to build projected oriels may have been related to the district surveyor jurisdictional system.
112. B, 17 July 1880, 85.
113. See Cocks and Biddulph & Co., Westminster, by R. Coad, B, 20 Dec. 1873, 999. Gibson's Bank, Saffron Walden, by W.E. Nesfield, BN, 6 Aug. 1880, 152.
114. BN, 8 Apr. 1881, 404.
115. BN, 29 Apr. 1881, 500.
116. Girouard, M., Sweetness and Light, 1977, 1.
117. B, 25 Apr. 1885, 582. B, 6 Aug. 1881, 172.
118. B, 5 June 1886, 812.
119. Summerson, London the artifact.
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121. BN, 19 Dec. 1890, 873.
122. BN, 2 Jan. 1885, 16.
123. B, 27 June 1874, 537.
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125. B, 28 Sept. 1895, 221.
126. See Waterhouse's obituary, B, 26 Aug. 1905, 221.
127. Pevsner, N., The Buildings of England: Yorkshire, 1972, 145.
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131. B, 17 Sept. 1864, 679-680. B, 22 Oct. 1864, 770.
B, 1 Sept. 1866, 641.
132. BN, 31 July 1874, 136.
133. B, 25 Dec. 1858, 864.
134. B, 25 Aug. 1883, 250.

135. B, 20 Nov. 1880, 612.
136. Scott, op. cit., 176.
137. B, 5 Sept. 1846, 422.
138. B, 30 Oct. 1858, 717.
139. Knight, op. cit.
140. B, 20 Jan. 1866, 42.
141. BN, 21 Nov. 1873, 557.
142. Scott, op. cit., 174.
143. B, 3 Feb. 1877, 114.
144. B, 3 Feb. 1877, 111.
145. B, 12 Dec. 1896, 487.
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148. BN, 11 Apr. 1862, 258.
149. BN, 21 Feb. 1879, 191.
150. B, 27 Oct. 1866, 792.
151. B, 5 June 1869, 447.
152. B, 22 Oct. 1864, 769+.
153. B, 4 Nov. 1865, 376. B, 20 Jan. 1866, 41.
154. B, 20 Jan. 1866, 40.
155. B, 8 Nov. 1889, 619.
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157. Knight, op. cit.
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161. BN, 16 Jan. 1874, 58.
162. B, 17 Nov. 1866, 850.
163. B, 11 Mar. 1871, 189.
164. A, 3 June 1882, after 342.
165. BJ, 9 Aug. 1899, 10.
166. BN, 23 Apr. 1897, 596.
167. B, 27 Oct. 1866, 793.
168. B, 19 Nov. 1881, 632.
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EARLY TWENTIETH CENTURY FORM:
MODERN BUILDINGS FOR MODERN IDEAS

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7. Ibid., 2.
8. Ibid., 15-19.
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10. Jones, op. cit.
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13. Simpson, H.W., Modern Office Management, 1933, 13.
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15. The Clerk, Aug. 1911, 114.
16. Casson, H.N., The Ideal Office, 1924, 5.
17. The Standard, 9 Apr. 1914.
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20. BN, 11 June 1920, 457.
21. TC.
22. TC.
23. PAC.
24. BOM, Dec. 1919, 101.
25. Concrete, June 1915, 275.
26. TC.
27. A, 23 Jan. 1920, 57.
28. B, 25 July 1908, 92.
29. Cubitt, M., Building in London, 1911, 288.
30. Glasgow Building Regulations Act 63 & 64 Vict. c.c1 1900.
31. Service, A., Edwardian Architecture, 1977, 136.
32. Doak, A.M. and Young, A.M., Glasgow at a Glance, 1977, pl.65.
33. Ibid., pl.131.
34. BJAE, 30 Jan. 1907, 11.
35. B, 24 Dec. 1915, 458.
36. B, 8 June 1907, 699.
37. Royal Liver Friendly Society New Chief Offices, n.d., 18.
38. Liverpool Improvements Act 45 Vict c. lv 1882.
39. B, 30 May 1908, 642.
40. Cubitt, op. cit., 286.
41. The directors of the Phoenix insisted on double glazing for their first floor windows in the 1913 rebuilding due to traffic noise.
42. Cubitt, op. cit., 288.
43. Royal Insurance Co. Archive, Building Committee Notes, 21 Nov. 1901.

44. Joseph, D., Buildings heights and ancient lights. RIBAJ, 1922-23, reprint.
45. B, 5 Mar., 1910, 251.
46. B, 20 Mar. 1909, 336.
47. Royal Insurance Co. Archive, Memorandum Book, 258. In contrast the Norwich Union paid only £33 per foot for its Piccadilly branch site previously noted. The Eagle Insurance Co. paid £13 per foot in Manchester, 'the highest price ever paid for property.' Memorandum Book, 261, 312.
48. Ibid., 234.
49. B, 19 Apr. 1884, 563. Bolton, R., High office buildings of New York, PICE, 1900/01, vol.CXL III, 213-252.
50. B, 13 Mar. 1914, 317.
51. B, 12 Nov. 1904, 486.
52. B, 7 Nov. 1908, 485.
53. RIBAJ, 1921/22, 157, 218, 257, 310-319.
54. Cubitt, op. cit., 288.
55. PAC.
56. Royal Insurance Co. Archive, Book 3. Similar variations are recorded in City Offices Co. records.
57. Cubitt, op. cit., 288.
58. Trollope and Sons and Colls and Sons built more than thirty-five offices in the city between 1900 and 1920.
59. TC.
60. AR, Jan. 1921, 6.
61. All notes PAC.
62. This was a serious problem because the building was steel framed. Steel design and fabrication lead times required resolution of the upper floors at the outset of design.
63. BN, 18 Apr. 1890, 543.
64. B, 31 Aug. 1917, 126.

Notes to Chapter 7.
TWENTIETH CENTURY STRUCTURE:
CONTROVERSY OVER FULL FRAMING

1. There were other early examples, but none which so completely explored the potential of the system. Carl Condit mentions precursors in The Chicago School of Architecture, 1964, 6-8. Also, the Sheerness Boat Store, 1858, in Fletcher, B., A History of Architecture, 1963, 983; and Oriel Chambers, Liverpool, 1864, in Ibid., 1047.
2. Condit, op. cit., is the standard source.
3. Bowley, M., The British Building Industry, 1966, 3-35.
4. Service, A., Edwardian Architecture, 1977, 128-139.
5. Condit, op. cit., 90.
6. Gibson, R.W., Fireproof buildings in the United States, RIBAJ, 1898/99, 49-68.
7. See, for example, Sullivan, L.S., City office buildings, RIBAJ, 1931/32, 601-618. Gilbert, W.R., Modern Steelwork, 1930.
8. Gass, J., Report of a visit to the USA, RIBAT, 1885/86, 145-152.
9. B, 9 July 1892, 23-25.
10. B, 17 Sept. 1892, 220.
11. B, 15 Oct. 1892, 295.
12. It was almost universal in Britain to progressively lower ceiling heights in office buildings in upper floors.
13. BJAR, 26 Apr. 1899, 174.
14. BJAR, 10 Dec. 1902, 271.
15. BJAR, 27 Nov. 1905, 307.
16. Fergusson, J., History of the Modern Styles of Architecture, 1862, 482. This section was reprinted verbatim in the 1873 edition, 556-559.
17. Barry, E., Architecture governed by technical principles, B, 21 Jan. 1880, 123-125.
18. White, W., The use of iron and steel in architecture, RIBAT, 1879/80, 178.
19. Gwilt, J., An Encyclopaedia of Architecture, 1899, 936.
20. There were other problems as well: decoration was difficult; it wasn't a 'natural' material.
21. White, op. cit.
22. Picton, J., Iron as a material for architectural construction, discussion, RIBAT, 1879/80, 187.
23. BJAR, 28 Dec. 1904, 340.
24. B, 17 Nov. 1866, 850.
25. B, 24 Dec. 1904, 653.
26. Lewis, T.H., On fire proof materials and construction, RIBAT, 1864/65, 109-126.
27. B, 9 Apr. 1898, 349.
28. Proof was the fire testing of John Whichcord's National Safe Deposit Co. offices, RIBAT, 1875/76, 87-102. The issue was discussed at the General Conference of 1878, RIBAT, 1877/78, 296-312.
29. Fergusson, op. cit., 1891, 57.

30. Russell, J.S., On the central dome of the Vienna Exhibition Building, discussion, RIBAT, 1873/74, 103-125.
31. Paddington Station where Digby Wyatt decorated Brunel's construction and St. Pancras Station where Scott's hotel shielded Barlow and Ordish's train shed were earlier collaborations.
32. Statham, H.H., Esthetic treatment of engineering work, Engineering, May 1898, 103-109.
33. Statham, H.H., Modern Architecture, 1897, frontpiece.
34. B, 6 Oct. 1900, 283.
35. RIBAJ, 1893/94, 562.
36. Caroe, W., London bridges, RIBAJ, 1893/94, 498-501.
37. Pite, B., The architecture of the bridges of London, RIBAJ, 1907/08, 425-448.
38. Cubitt, H., The influence on architecture of modern methods of construction, B, 4 Sept. 1909, 261-264.
39. Aitchison, G., Iron, RIBAJ, 1902/03, 468-477.
40. Compare note 39 with B, 17 Feb. 1883, 207.
41. B, 17 Feb. 1883, 207.
42. Aitchison, op. cit.
43. BJAR, 4 June 1902, 247.
44. BJAR, 25 May 1898, 286.
45. Cunningham, T.C., Architectural and constructional engineering, discussion, B, 25 Jan. 1902, 80-86.
46. BJAR, 9 Dec. 1903, 251.
47. Denell, R.A., American methods of erecting buildings, discussion, RIBAJ, 1905/06, 28-49.
48. B, 12 Nov. 1904, 486.
49. Cunningham, op. cit.
50. BJAR, 26 Apr. 1899, 174.
51. B, 25 Oct. 1907, 436.
52. B, 12 May 1856, 264.
53. B, 11 July 1857, 389.
54. B, 31 Jan. 1880, 124.
55. At Bristol Society of Architects, B, 20 Apr. 1901, 385-389.
56. At Manchester Surveyors Institute, BJAR, 25 May 1898, 291-292.
57. Proceedings Institute of Civil Engineers, 1896/97, vol.CXXVIII, 11-57.
58. Stannus, H., The artistic treatment of constructional ironwork, discussion, RIBAT, 1881/82, 113-132.
59. Brunel, G., On the influence of some external agents on the durability of building materials, RIBAT, 1853/54, 137-154.
60. Clark, E., The durability of materials, PICE, 1867/68, vol.XXVII, 554-581.
61. Moreland, R., Constructional ironwork for buildings, PICE 1883/84, vol.LXXI, 281-296.
62. Matheson, E., Steel for structures, PICE, 1881/82, vol.LXIX, 1-78.
63. Picton, J.A., Iron as a material for architectural construction, B, 24 Apr. 1880, 496. B, 29 May 1880, 666.
64. Ibid., discussion.
65. Ibid., discussion.
66. Prof. Barff, The corrosion of iron, discussion, RIBAT, 1877/78, 265-276.

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157. The south half was built first, opened in 1900.
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159. Cunningham, Architectural engineering. Cunningham was probably the engineer. Trollope and Colls were the builders, but their records are incomplete.
160. TC.
161. BN, 10 June 1904, 833. J. Greenwood Ltd. builders.
162. B, 8 Sept. 1906, 323.
163. B, 6 Jan. 1906, 21.
164. B, 11 Nov. 1905, 507. B, 29 May 1909, 653.
165. B, 29 June 1907, 787.
166. These were common in Glasgow. In London they were believed to be obtrusive to lighting.
167. BJAE had the most complete coverage, including construction progress photos and structural framing plans. See Conc. and and Steel Supplements, 18 July 1906, ; 10 Oct. 1906, 69; 7 Nov. 1906, 85; 27 Feb. 1907, 21.
168. B, 25 Apr. 1908, 485.
169. B, 2 Feb. 1907, 126.
170. The Hamburg Amerika Linie Building, about the same size, took 18 months to build. BJAR, 30 Dec. 1908, 160.
171. Dunn and Watson's Scottish Provident Institution on Lombard Street was finished by Cubitt's in 1907 after 251 working days. B, 19 Jan. 1907, 65. It had six floors on a 5,500 sf site. The Morning Post had eight floors on about a 7,000 sf site.
172. B, 25 Apr. 1908, 485.

173. 1907, 42/3 New Broad Street, Ernest Flint, arch., full frame except roof on masonry walls, TC.
1907, 71 Old Broad Street, Joseph and Smithen, arch., TC.
1908, Hamburg Amerika Linie, Cockspur St., Arthur T. Bolton, arch., BJAE, 30 Dec. 1908, 160. B, 21 Mar. 1908, 338.
1908, 103 Oxford Street, Phillip Pilditch, arch., BN, 4 Sept. 1908, 329.
1908, Mappin House, Oxford Street, John Belcher, arch., BJAE, 30 Dec. 1908, 174. B, 29 Feb. 1908, 244.
1909, Union Bank of Scotland, Cornhill, arch. unknown, TC.
1909, William Deacons Bank, Cheapside, T.S. Smith, arch., TC.
1909, Royal Insurance Building, Piccadilly, John Belcher, arch., BJAE, 30 Dec. 1908, 2. B, 20 Feb. 1909, 219.
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177. B, 17 Apr. 1914, 475.
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Jackson, op. cit.
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183. Based on field experience, a Boston architect concluded 33 psf was more likely to be the actual load.
184. Jackson, op. cit.
185. Purdy, PICE
186. Jackson, op. cit.
187. Unprotected bottom flanges but with a Fawcett Fireproof Floor, TC.
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196. Marsh, C. and Dunn, W., Reinforced Concrete, 1906.
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199. B, 6 Nov. 1914, 429.
200. TC.
201. B, 23 May 1913, 592.
202. B, 13 Feb., 1914, 193.
203. Concrete, June 1915, 273-282.
204. For example, Service, op. cit., 137-138.
205. AR, Dec. 1911, 336-339.

206. Mercantile Bank of India, 1913, Furness Withy, 1913, TC.
207. TC.
208. B, 5 Mar. 1915, 229.
209. David Walker, Sir John Burnet, in Service, A., ed., Edwardian Architecture and its Origins, 1975, 192-215.
210. Canada House, B, 10 Sept. 1915, 190.
Empire and India Houses, see also B, 2 Oct. 1914, 316.
Imperial House, BN, 31 Oct. 1913, 609.
Shell Corner, AJ, 16 Nov. 1921, 587.
Central House, BN, 22 Nov. 1912, 722.
211. Bowley, op. cit., 15-35.
212. Ibid., 18.
213. Ibid., 20.
214. B, 8 Sept. 1911, 275.
215. B, 4 July 1913, 1.
216. B, 7 Jan. 1916, 17.
217. B, 3 Apr. 1909, 394.
218. ABJ, 7 Apr. 1912, 403.
219. B, 17 Apr. 1914, 473.
220. Judgment based on a review of periodicals to 1925 and Trollope and Colls records.
221. B, 12 Nov. 1920, 545.
222. B, 2 Jan. 1920, 30.
223. AJ, 4 Jan. 1922, 34.
224. BJAE, 20 June 1906, 30.
225. Trollope and Colls built several buildings with this system.
226. B, 9 Aug. 1912, 177.
227. B, 13 Feb. 1914, 193.
228. The Builders' Journal and Architectural Engineer featured articles on these systems in 1906-07.
229. B, 14 Mar. 1908, 306. B, 7 Aug. 1914, 100. B, 14 Nov. 1913, 507. BN, 27 Dec. 1912, 902.
230. B, 27 Aug. 1910, 242.
231. BN, 26 Sept. 1913, 437.
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233. Glasgow Building Regulations Act 63 & 64 Vict c. cl 1900.
234. BN, 21 June 1916, 611.
235. B, 25 May 1917, 337.
236. B, 8 Mar. 1912, 275.

Notes to Chapter 8.
EARLY TWENTIETH CENTURY SERVICES:
INTEGRATION OF MODERN SYSTEMS

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2. B, 11 Nov. 1876, 1092.
3. Acres, W.M., The Bank of England from Within, 1931, 479.
4. B, 22 Oct. 1864, 769.
5. B, 26 Nov. 1859, 789+.
6. NWB.
7. B, 14 June 1873, 489.
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9. B, 23 Feb. 1844, 26.
10. Jarvis, C.M., Distribution and utilisation of electricity, in Singer, C., ed., History of Technology, 1958, vol.V, 208-234.
11. Stanford's Map of London, 1890.
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15. B, 1 Aug. 1891, 87.
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17. B, 17 June 1899, 599.
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19. B, 7 Mar. 1903, 243. Middleton, G.A.T., Modern Buildings, 1904-1907, vol. , 159.
20. ABJ, 12 Jan. 1910, 24.
21. B, 22 Oct. 1881, 527.
22. B, 27 Jan. 1883, 106.
23. NWB.
24. B, 8 Apr. 1893, 264.
25. MB, Managing Director's Diary.
26. Lloyds Bank, Minute Books Premises Committee.
27. Electra House, 1904, 10.
28. The New Cunard Building, n.d., 70.
29. B, 29 Feb. 1896, 179.
30. B, 7 July 1900, 15.
31. B, 27 Nov. 1909, 576.
32. IE, Jan. 1916, 6.
33. B, 27 Feb. 1914, 263.
34. B, 22 June 1907, 758. B, 21 Apr. 1906, 431. B, 12 Feb. 1910, 159.
35. B, 9 June 1907, 789.
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37. IE, Feb. 1919, 31.
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44. IE, Dec. 1915, 509.

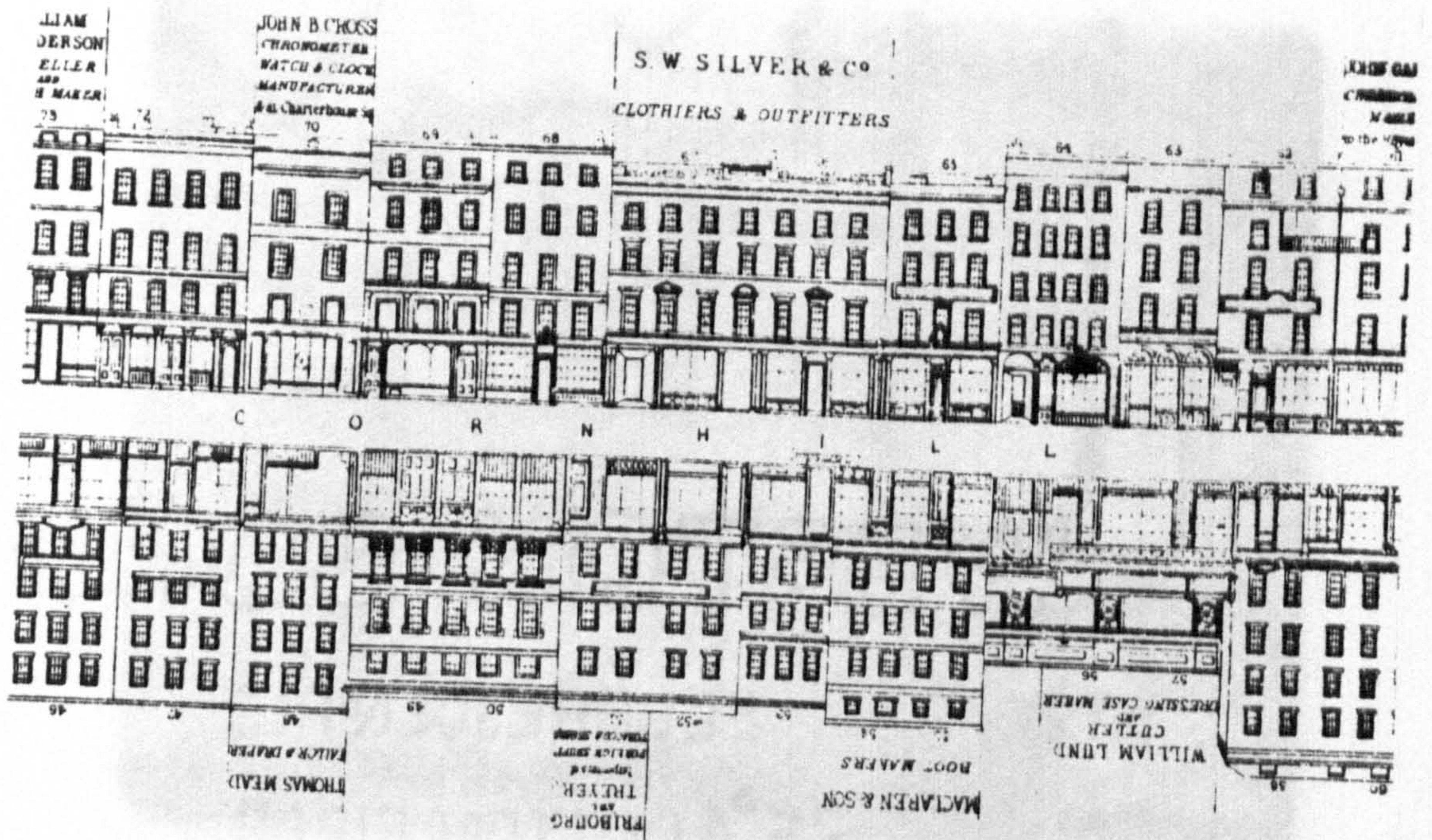
45. A, 20 Oct. 1919, 252.
46. IE, Dec. 1915, 507.
47. IE, Nov. 1916, 356. Luckiesh wrote The Lighting Art, 1917, Artificial Light, 1920, Light and Work, 1924. The latter two were published in Britain.
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49. B, 5 Sept. 1896, 183-184.
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51. B, 27 Sept., 1917, 185. ABJ, 29 Oct. 1913, 408. Barker, A.H., Barker on Heating, 1912, 609.
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75. TC. Others built by Trollope and Sons and Colls and Sons were London House, 1912, Hong Kong and Shanghai Bank, 1912, Mercantile Bank of India, 1913, Finsbury Circus House, 1914, 11 Angel Ct., 1914.

Notes to Chapter 9.
EARLY TWENTIETH CENTURY STYLE:
NEW IDEAS: NEW ATTITUDES

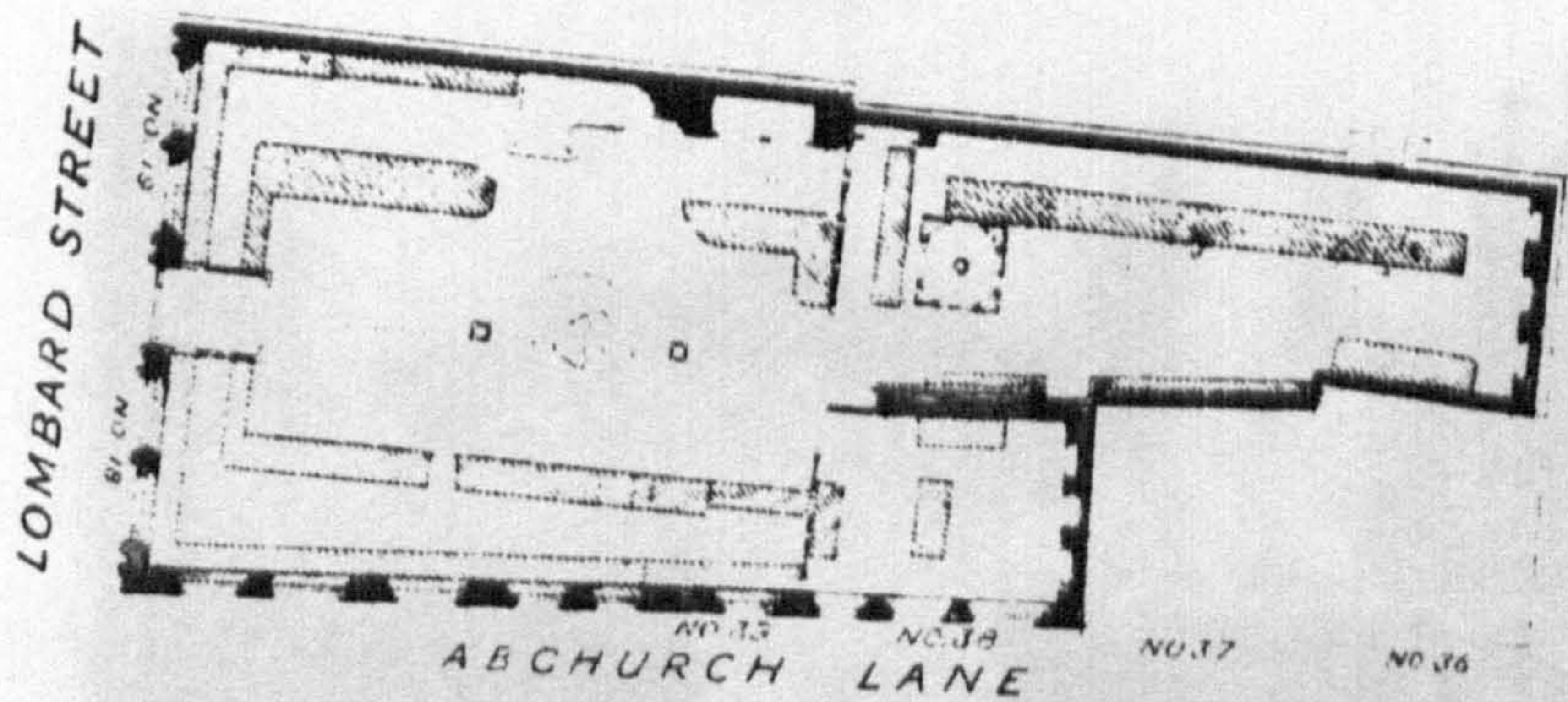
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9. Ibid., 247.
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12. Ibid., 281.
13. B, 24 Apr. 1909, 487.
14. B, 8 Oct. 1904, 358.
15. B, 14 Mar. 1913, 313.
16. B, 24 Dec. 1904, 653.
17. B, 21 Oct. 1905, 409,
18. BN, 2 Nov. 1900, 598.
19. See letter in B, 10 Nov. 1900, 421.
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32. BN, 4 Nov. 1905, 649.
33. B, 15 Mar. 1915, 229.
34. BN, 25 Aug. 1922, 117.
35. Service, A., Edwardian Architecture, 1977, 62-63.
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37. BN, 2 Feb. 1906, 169.
38. BN, 6 Apr. 1900, 476.
39. B, 30 May 1896, 470.
40. It is ironic that these pavilions contain mundane uses. One houses a toilet room, the other contains bicycle storage.
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42. B, 12 June 1914, 703.
43. B, 9 Aug. 1912, 177.
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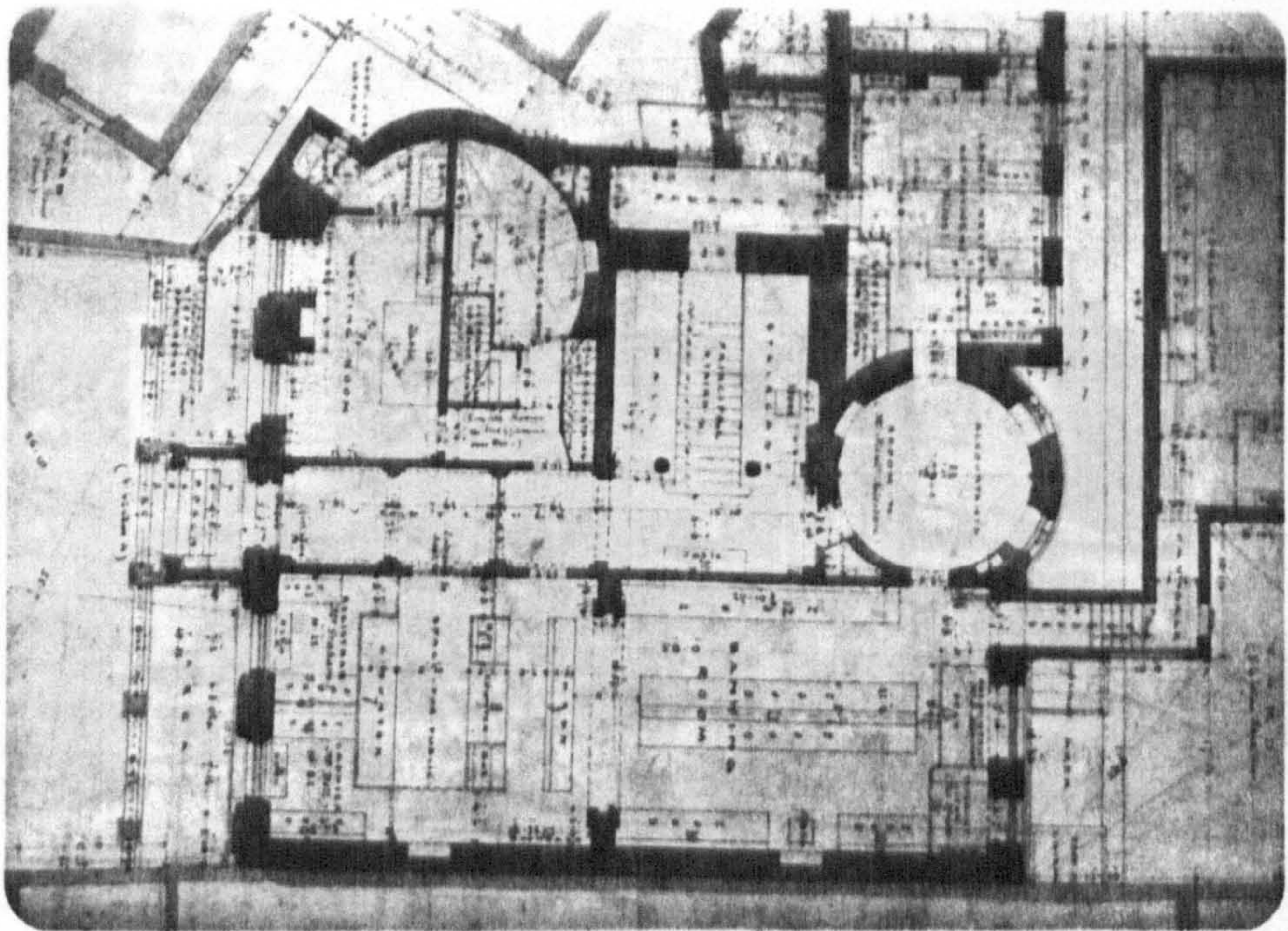
ILLUSTRATIONS



2-1
 CORNHILL STREET, City, 1847
 PHOENIX ASSURANCE CO., City, 1838
 2-2



Plan of PHOENIX Offices in 1836.

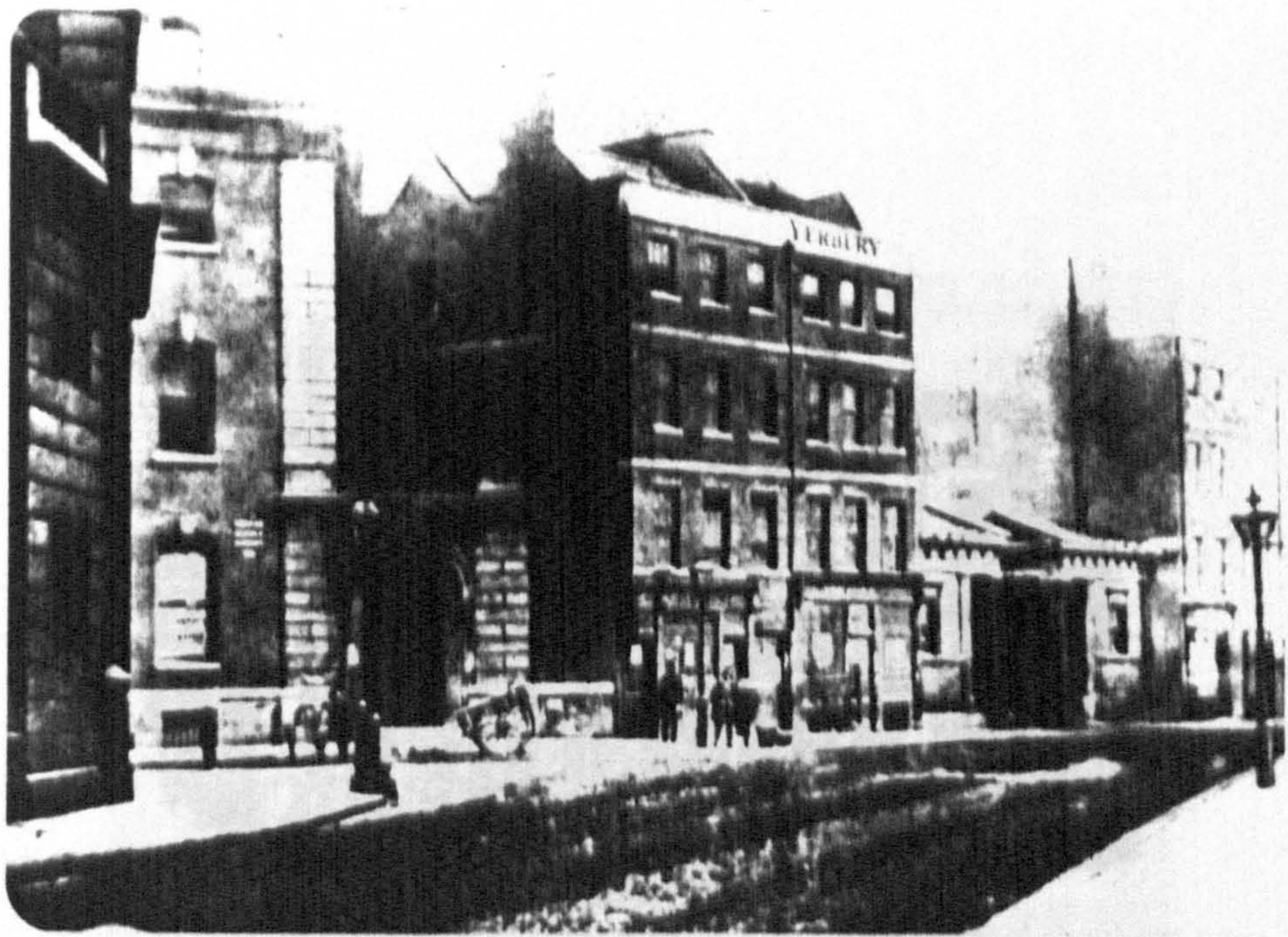


2-3

NATIONAL PROVINCIAL BANK, City, 1840
 NATIONAL PROVINCIAL BANK, City, 1840

2-4

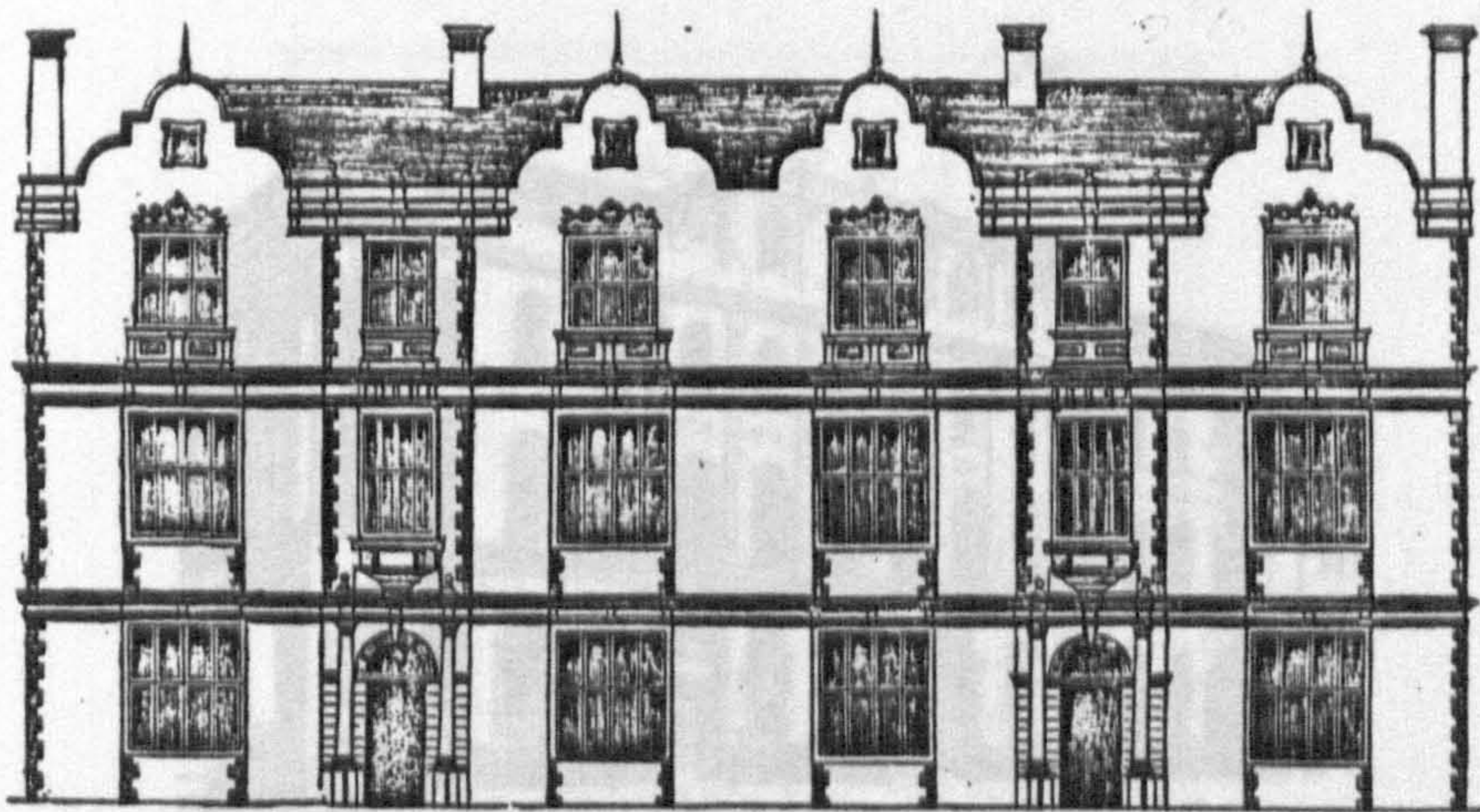


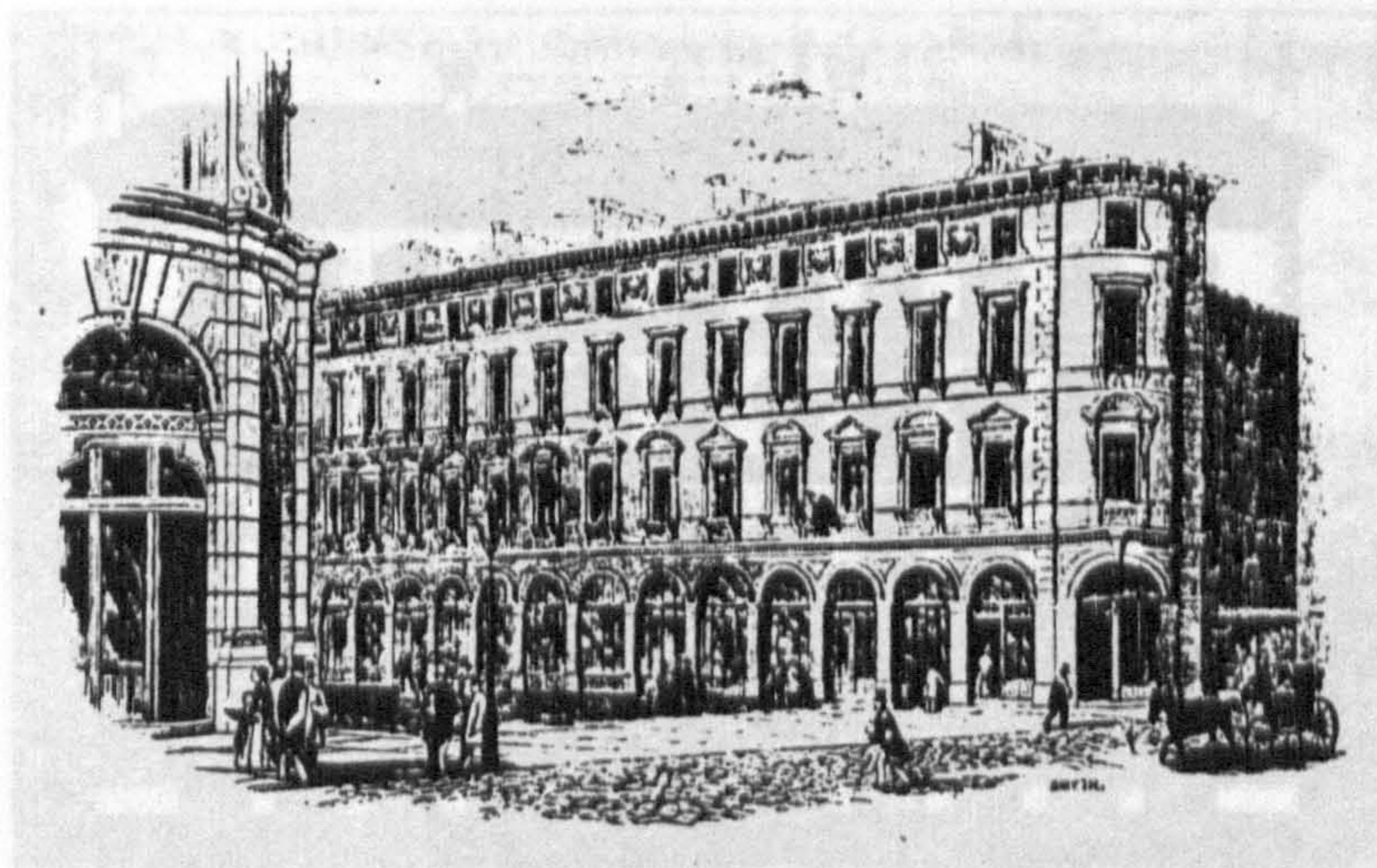


2-5

NATIONAL PROVINCIAL BANK, City, 1840
STAPLES INN CHAMBERS, City, 1843

2-6



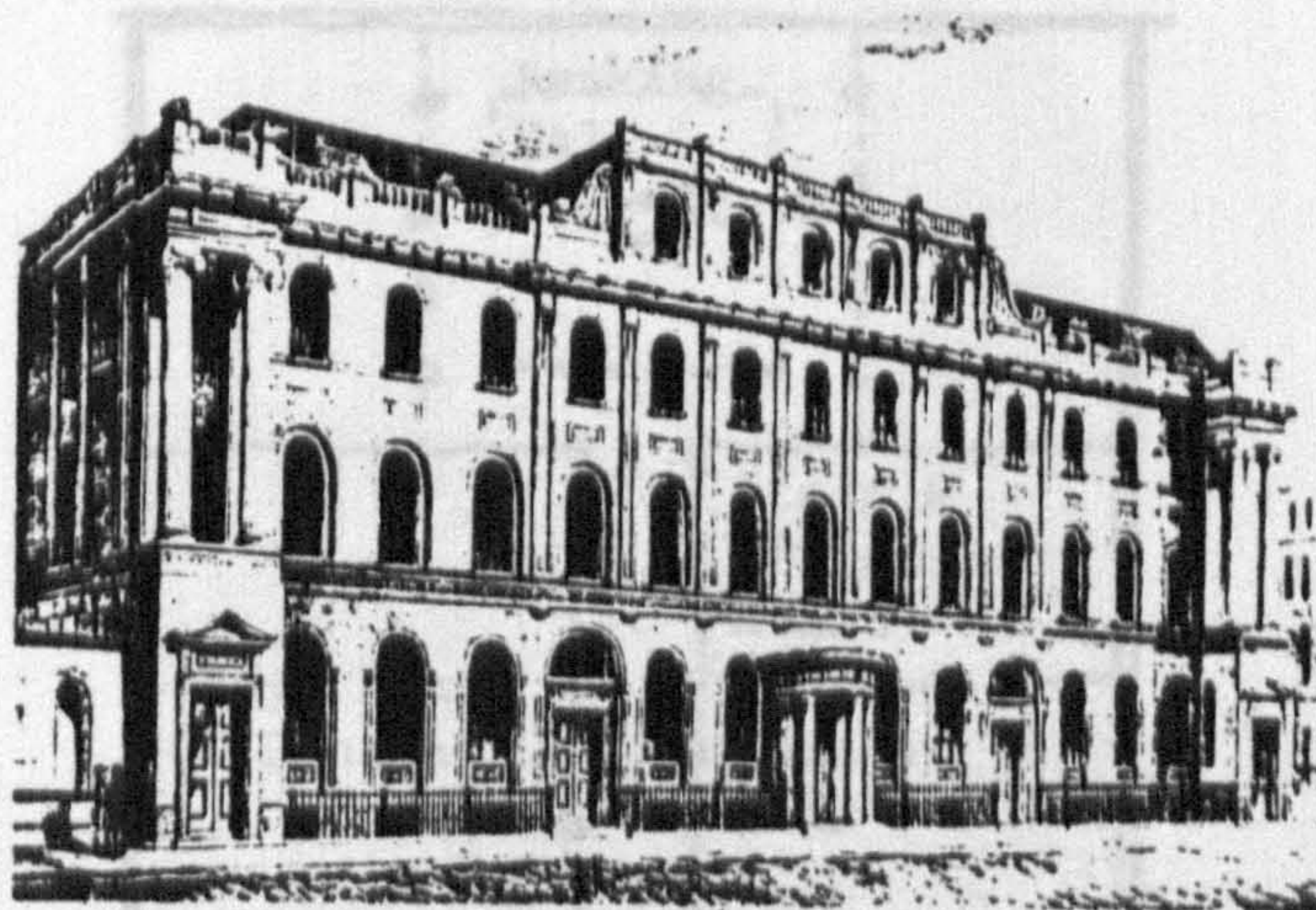


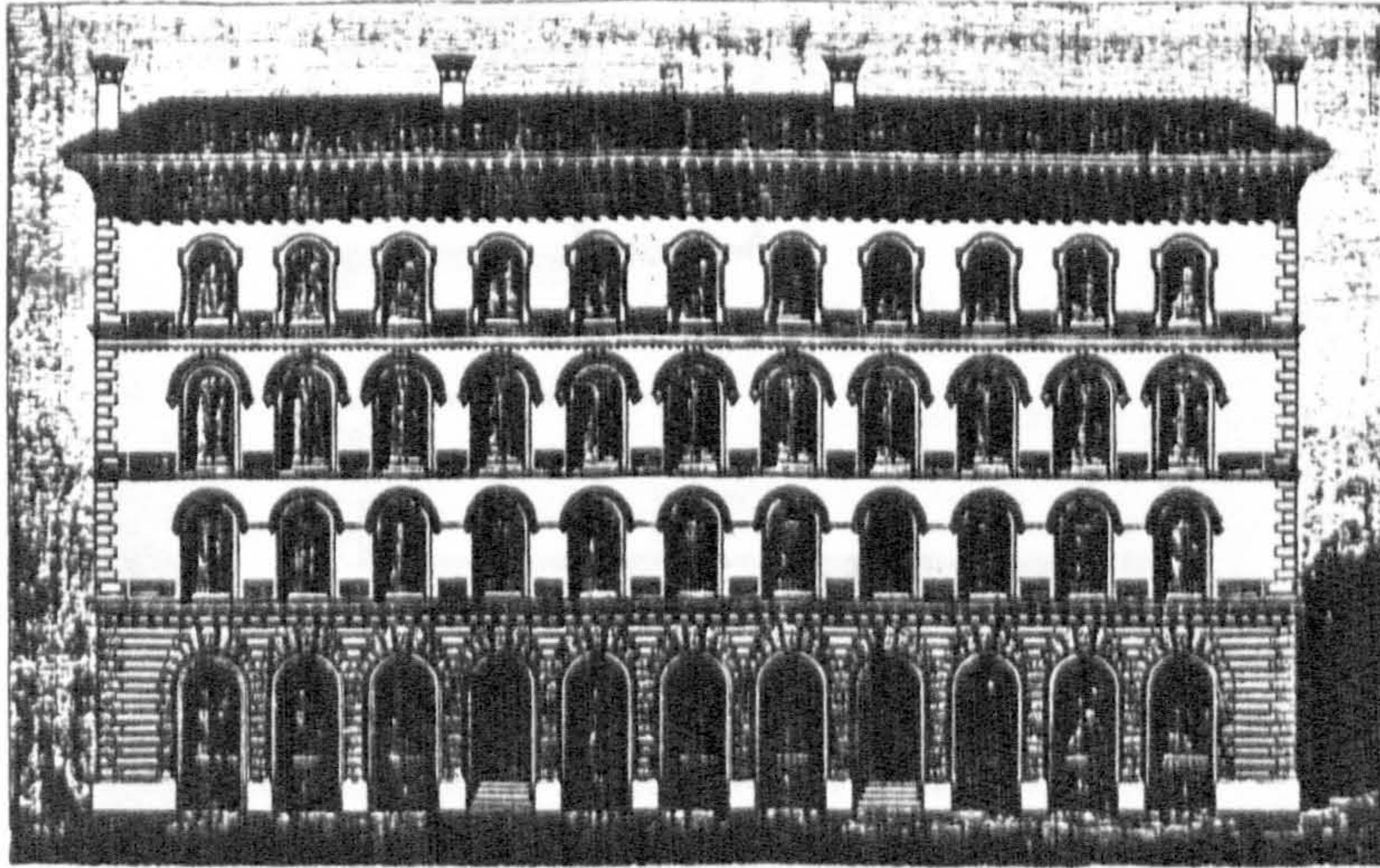
2-7

ROYAL EXCHANGE BUILDINGS, City, 1844

NEW BANK BUILDINGS, City, 1807

2-8

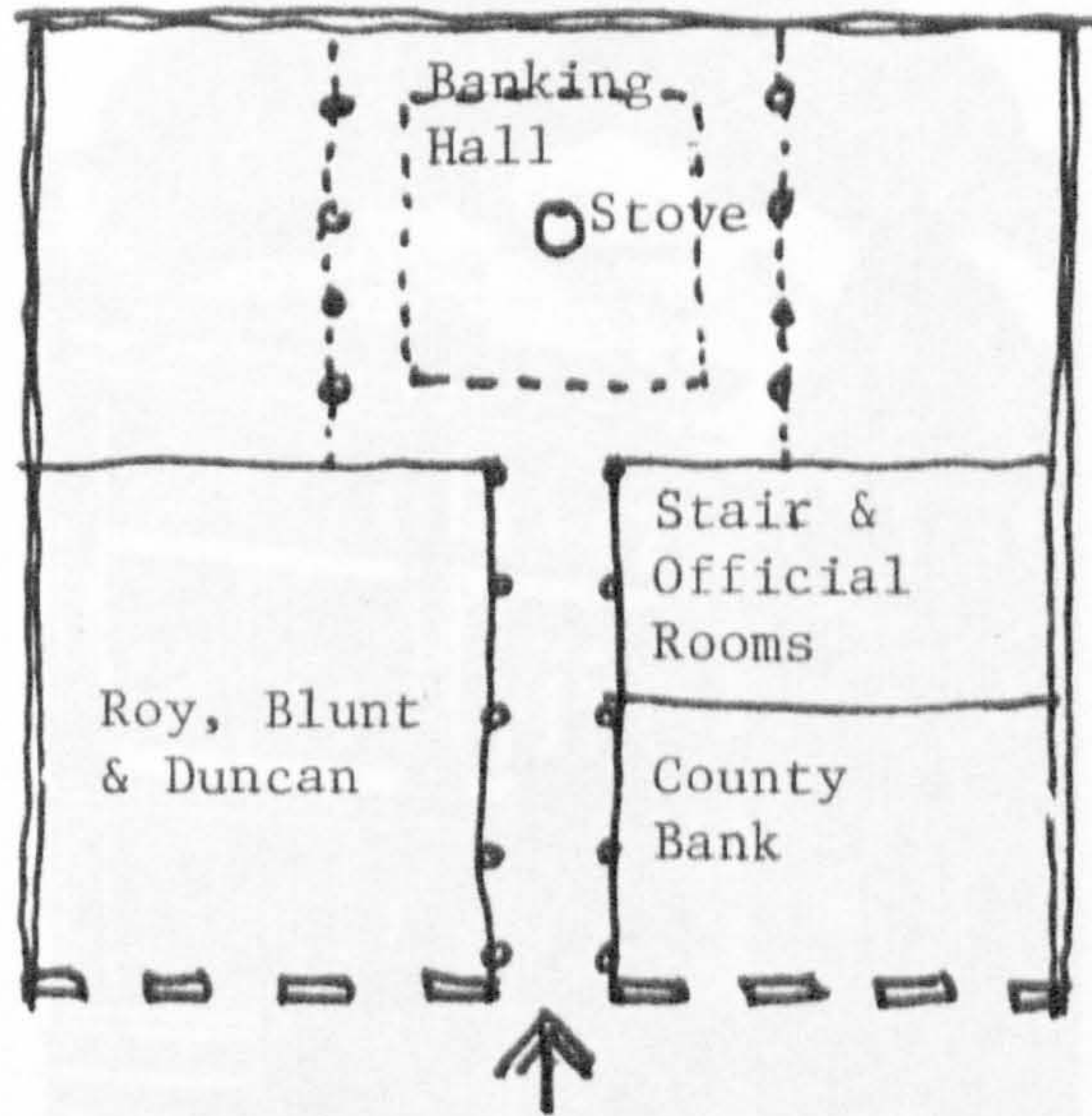


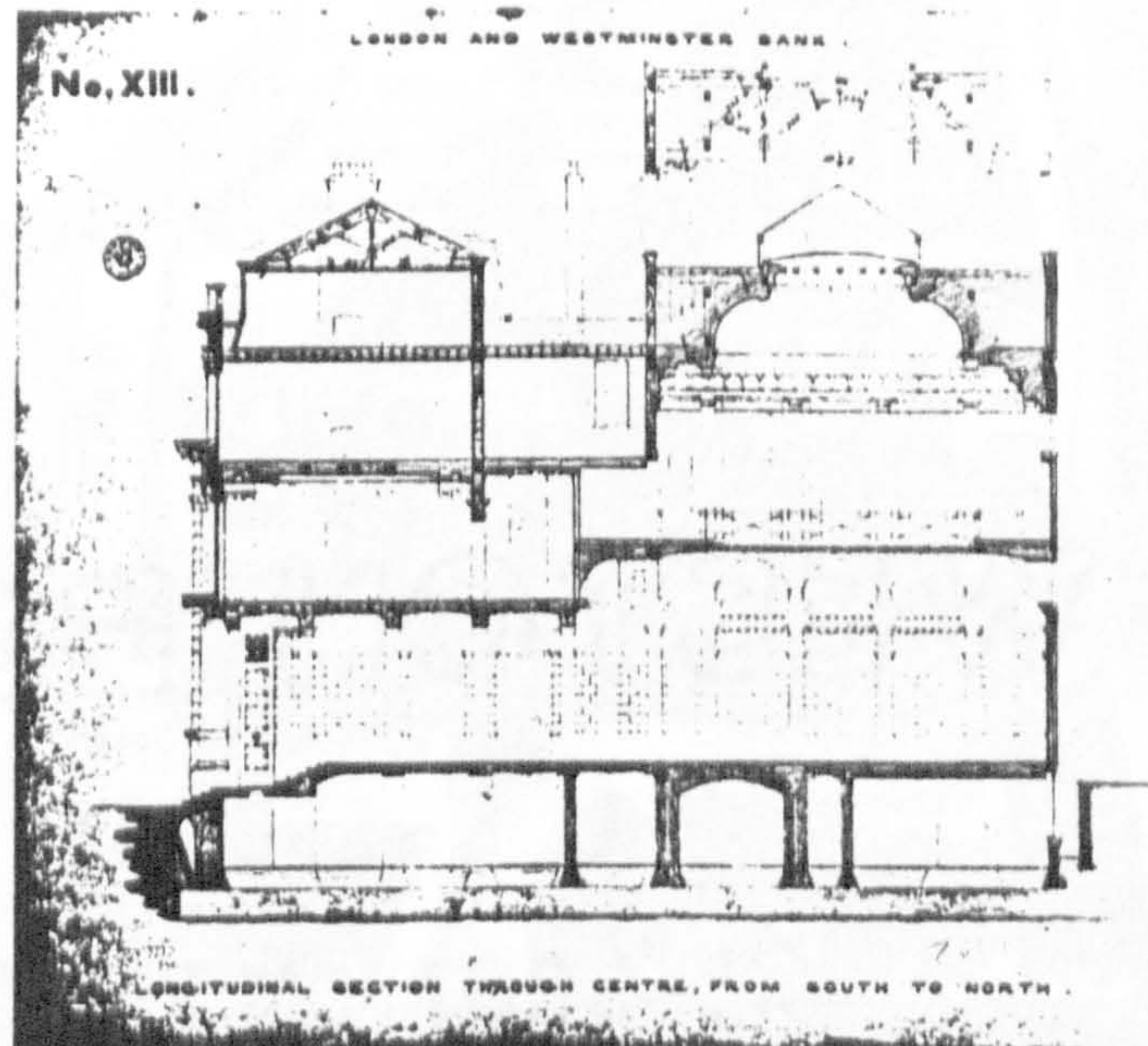


2-9

HODGESON'S BUILDINGS, City, 1855
LONDON AND WESTMINSTER BANK, City, 1838

2-10

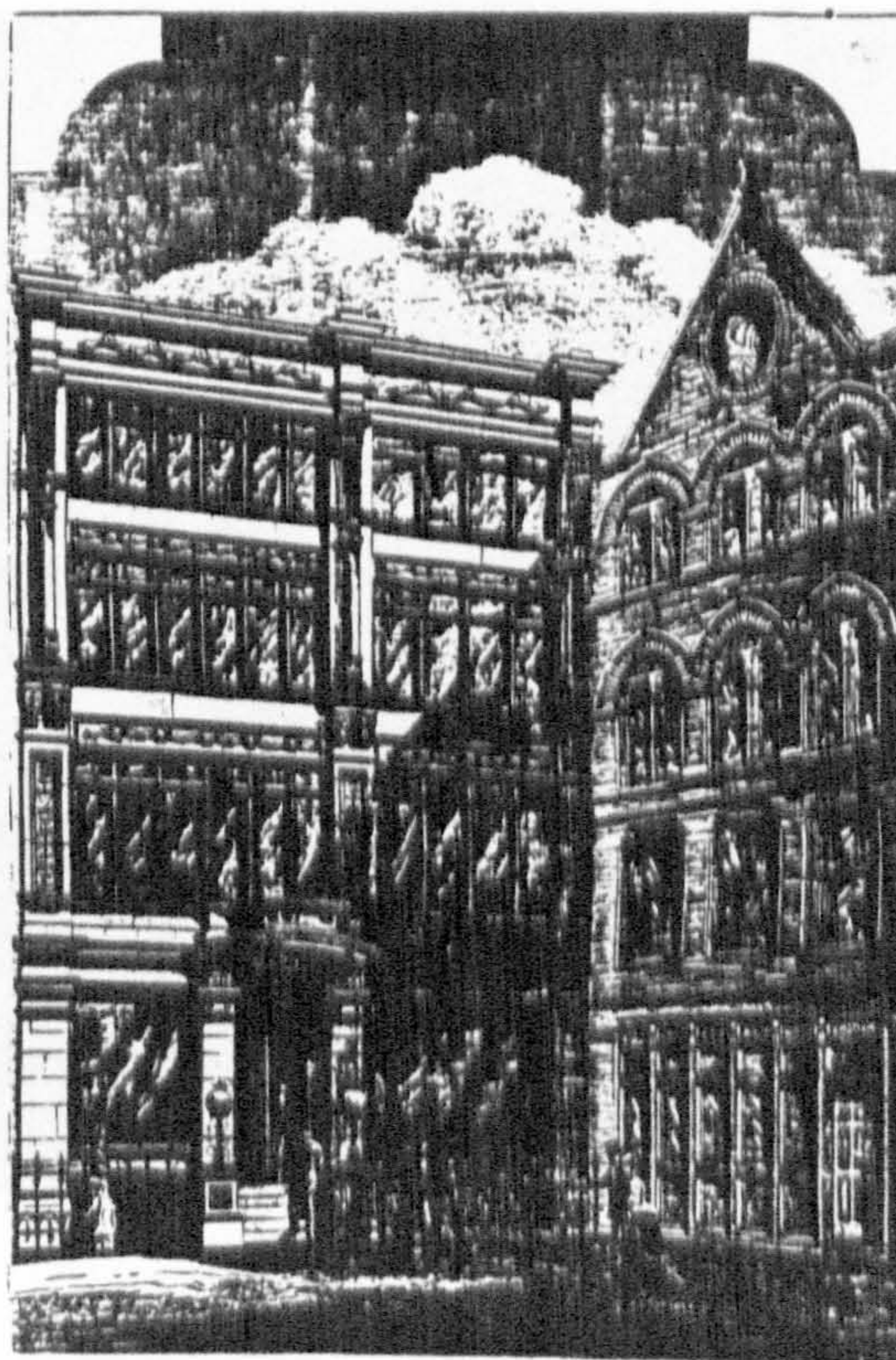


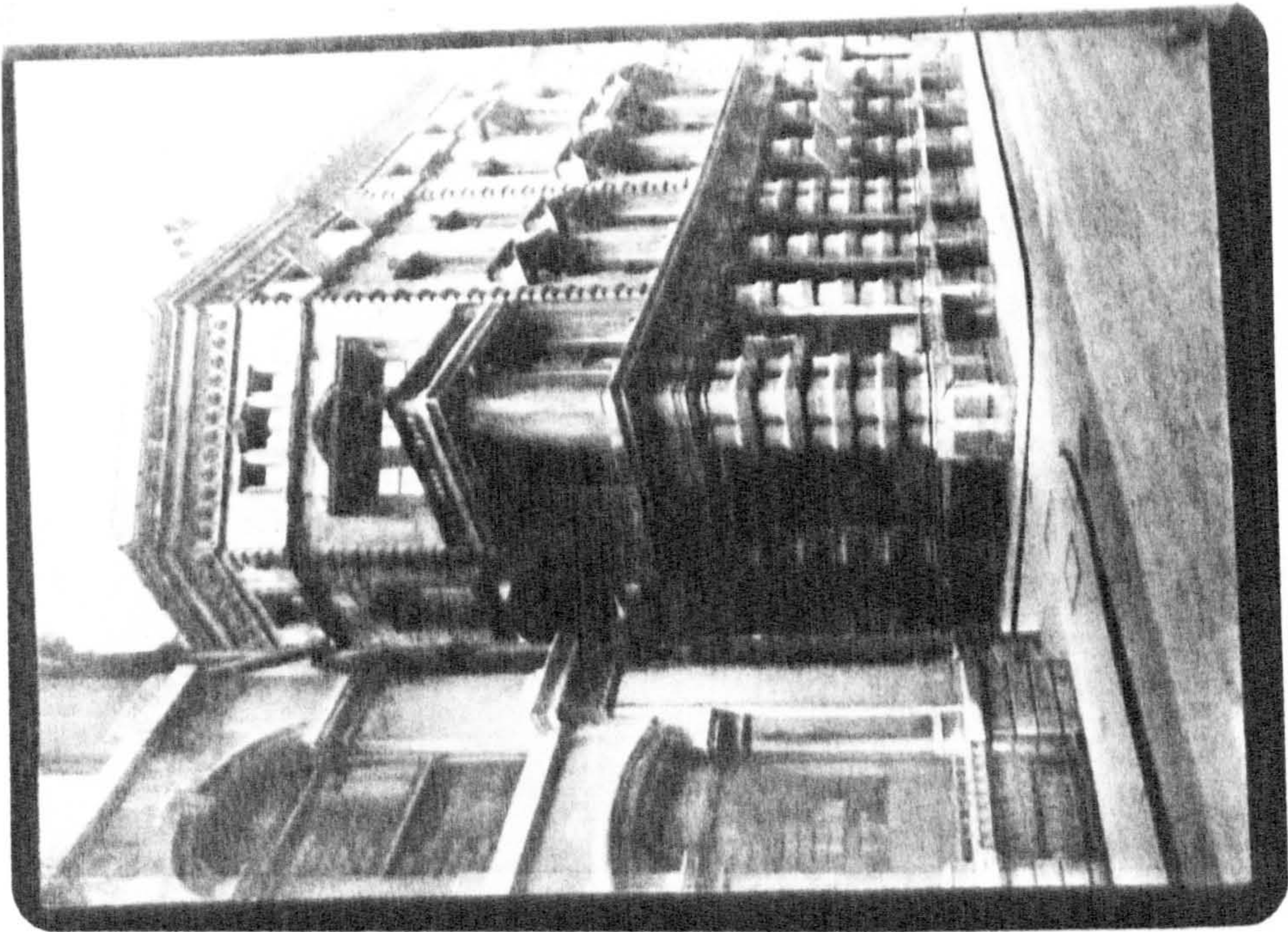


2-11

LONDON AND WESTMINSTER BANK, City, 1838
CROWN COURT BUILDINGS, City, 1875

2-12

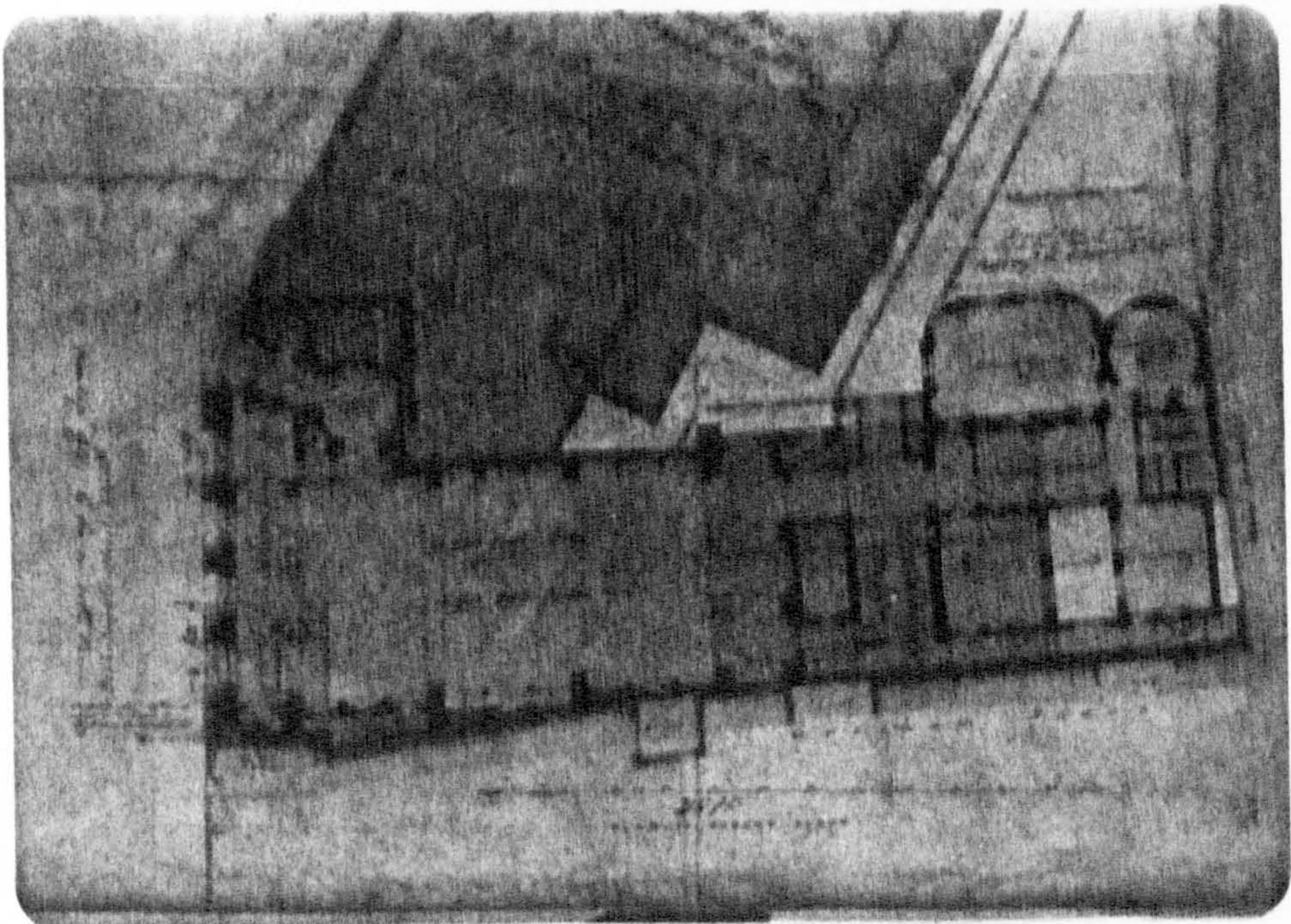


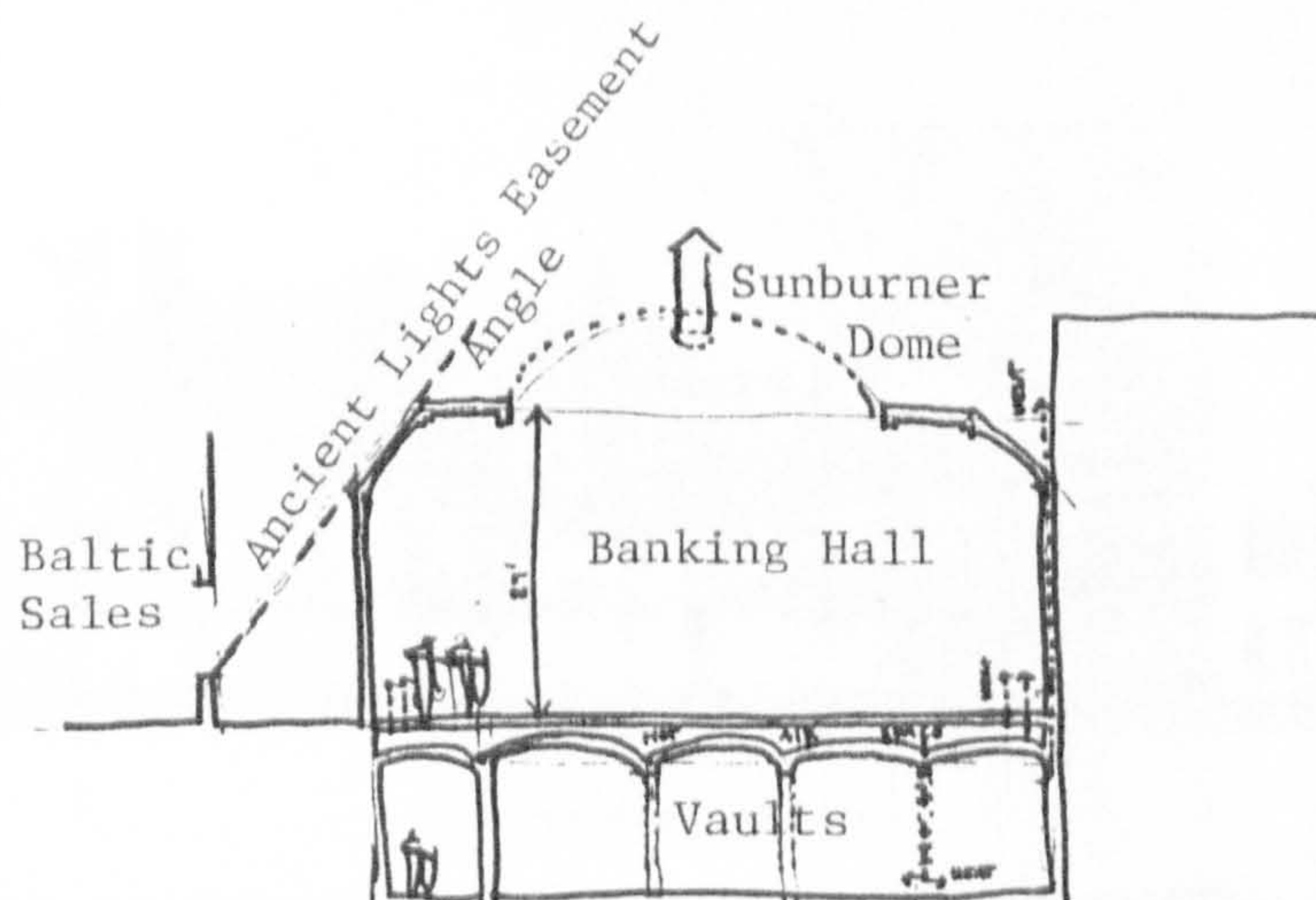


2-13

LONDON AND COUNTY BANK EXTENSION, City, 1875
NATIONAL PROVINCIAL BANK, City, 1863

2-14



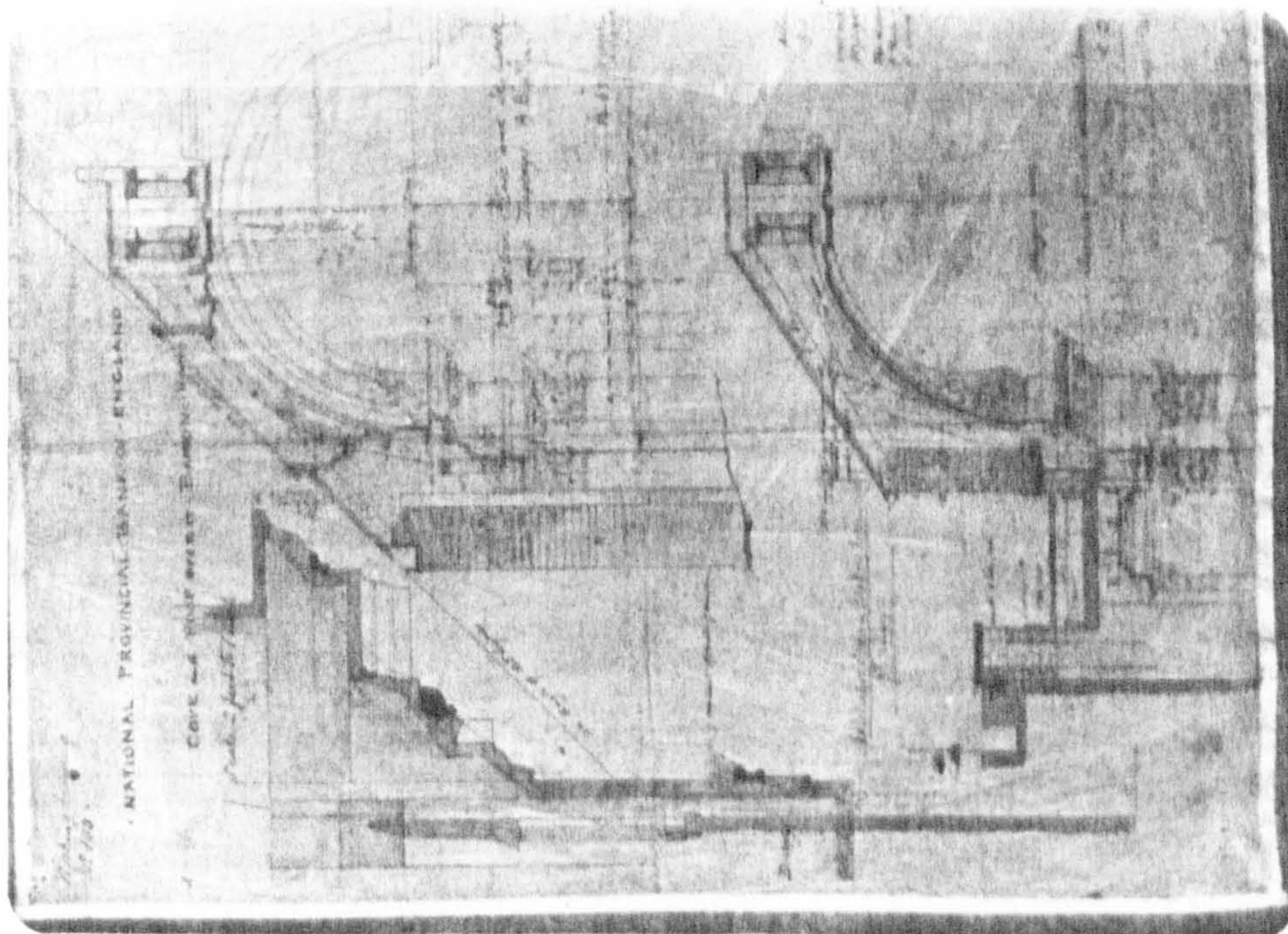


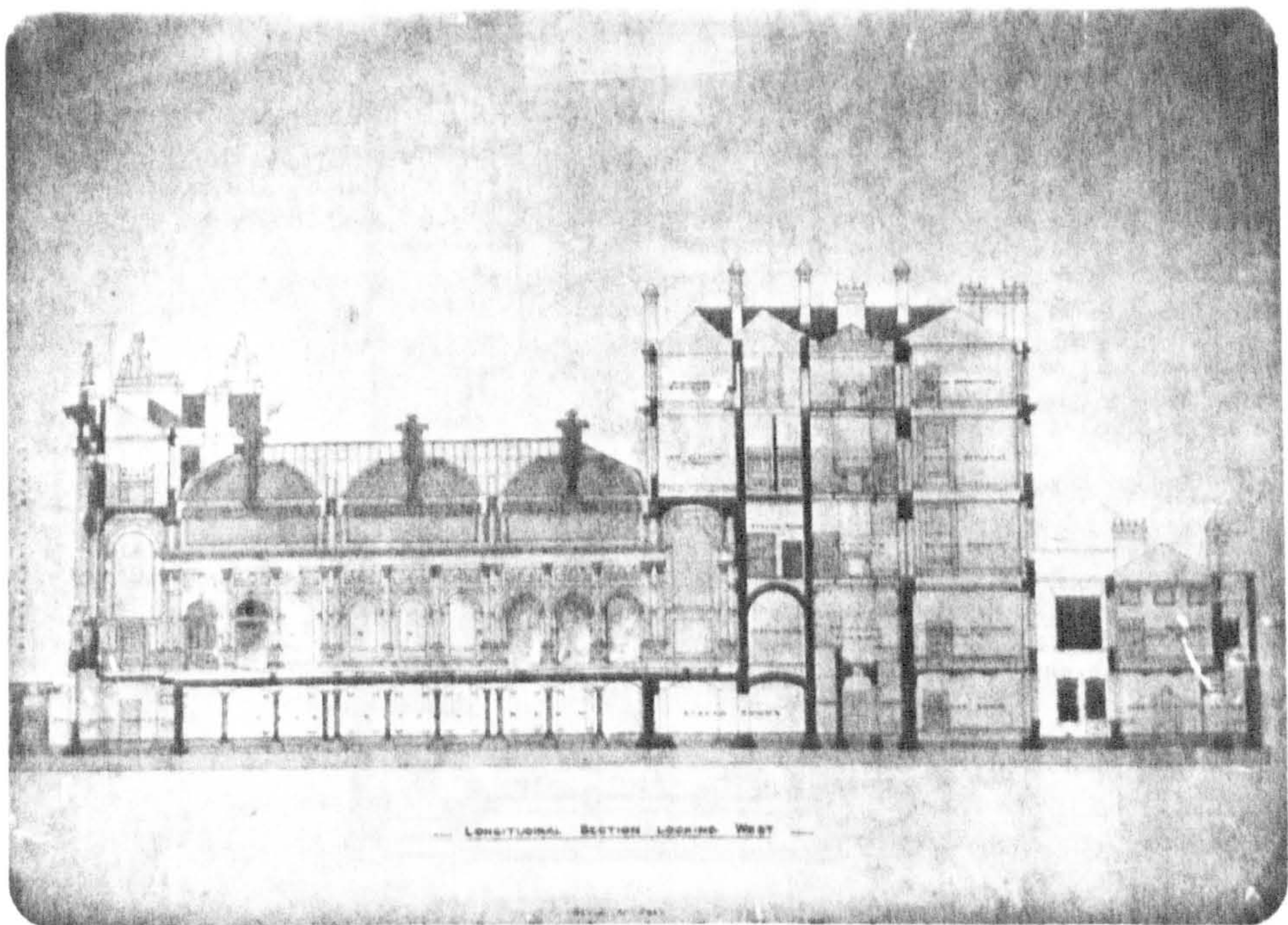
2-15

NATIONAL PROVINCIAL BANK, City, 1863

NATIONAL PROVINCIAL BANK, City, 1863

2-16



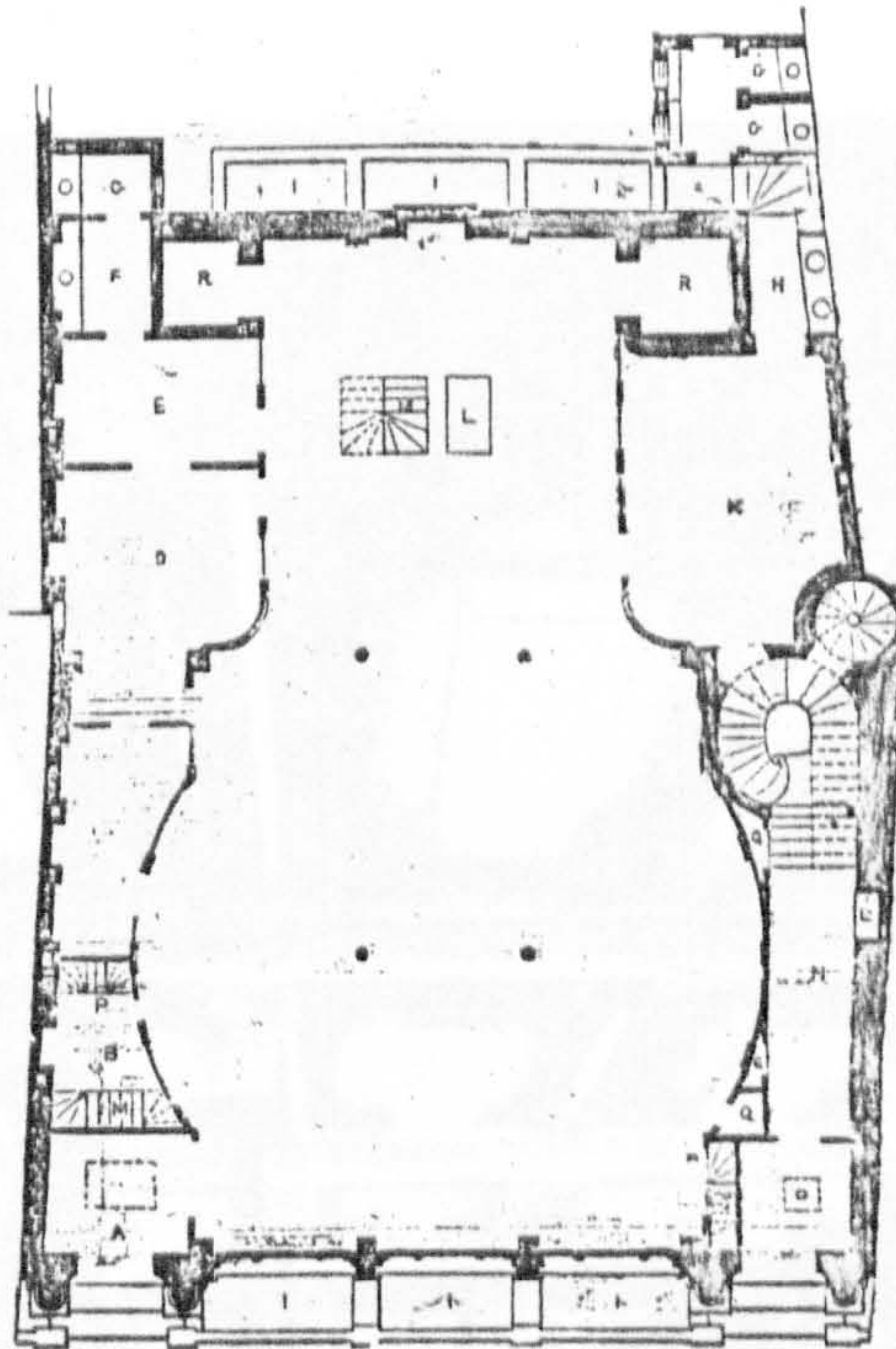


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NATIONAL PROVINCIAL BANK, City, 1863
NATIONAL PROVINCIAL BANK, City, 1863

2-18

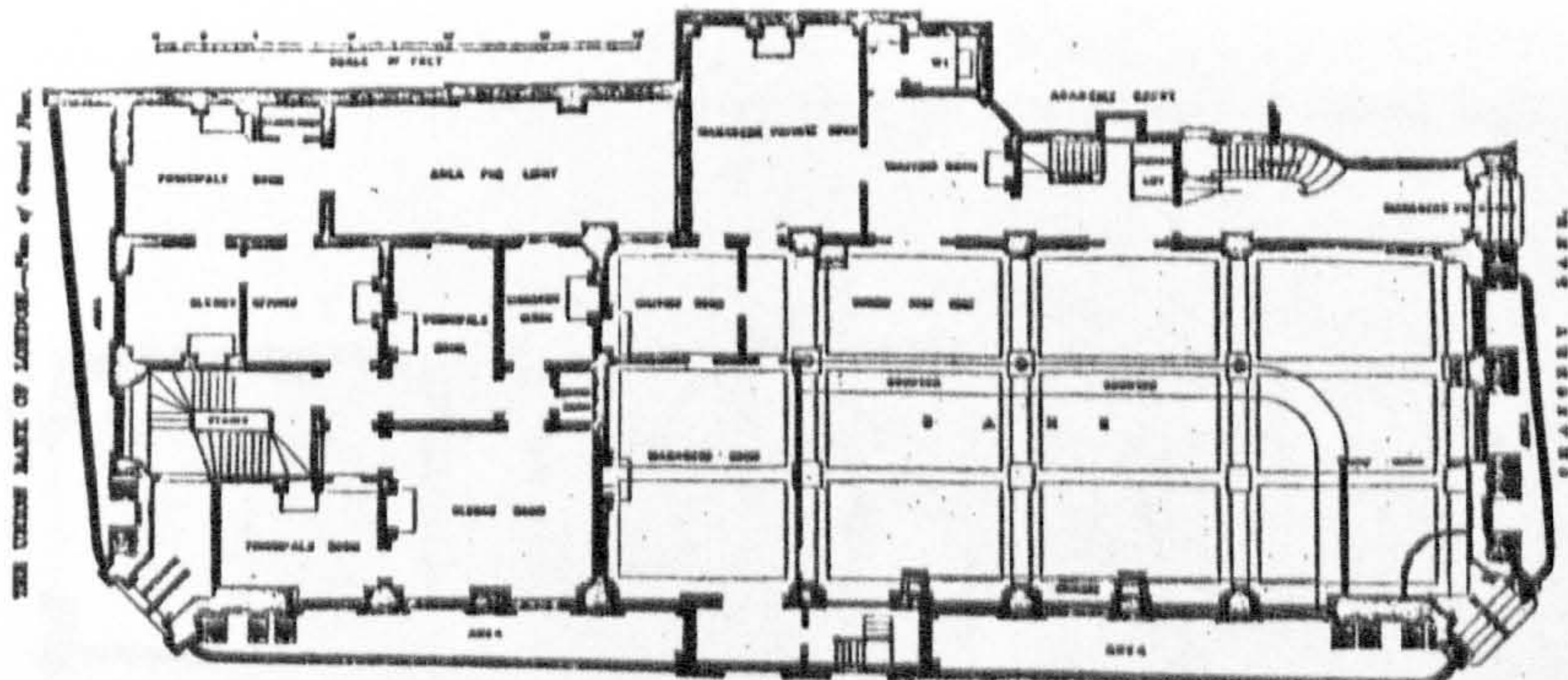


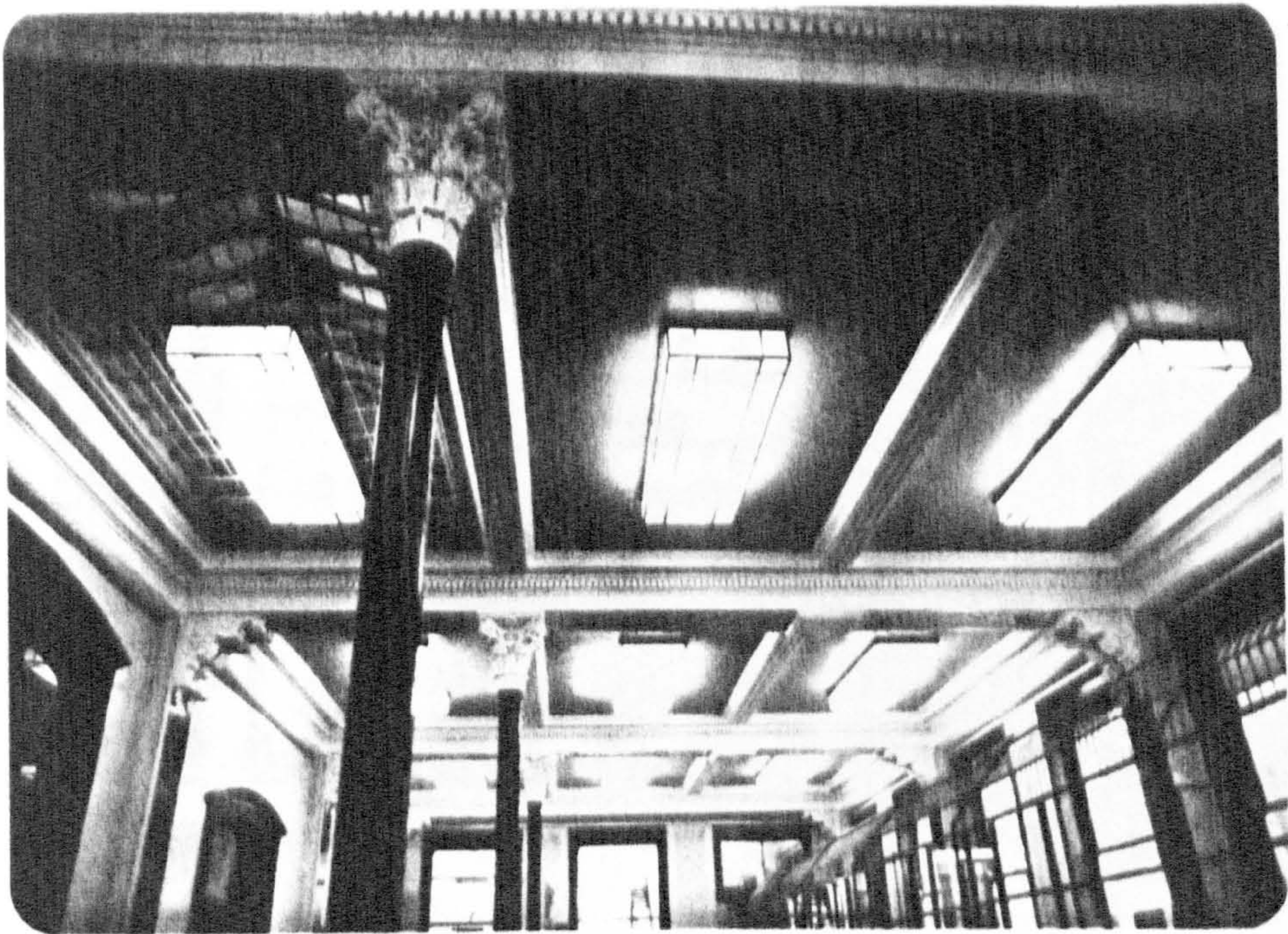


2-19

LONDON AND WESTMINSTER BANK, Holborn, 1853
UNION BANK OF LONDON, City, 1866

2-20

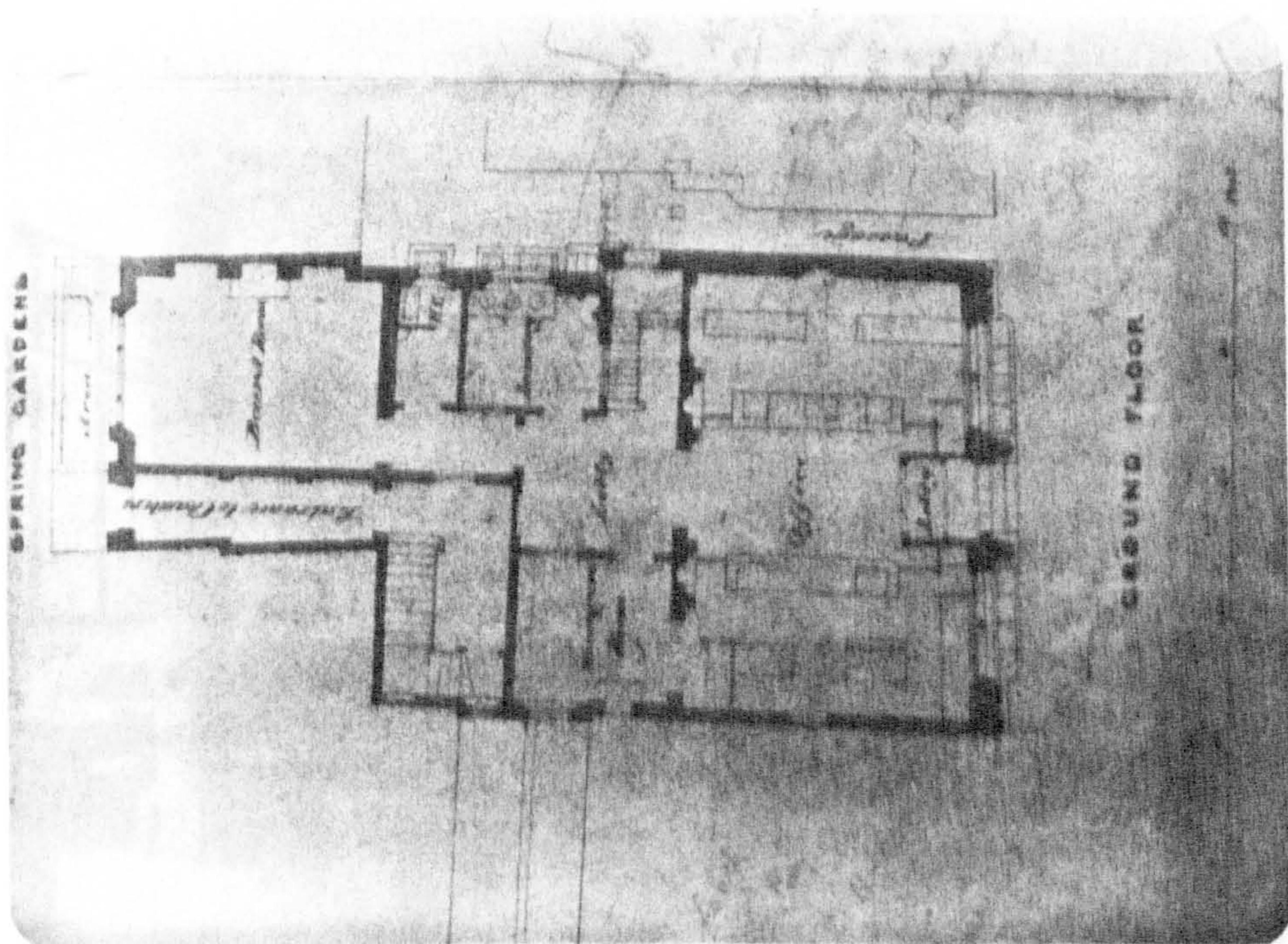


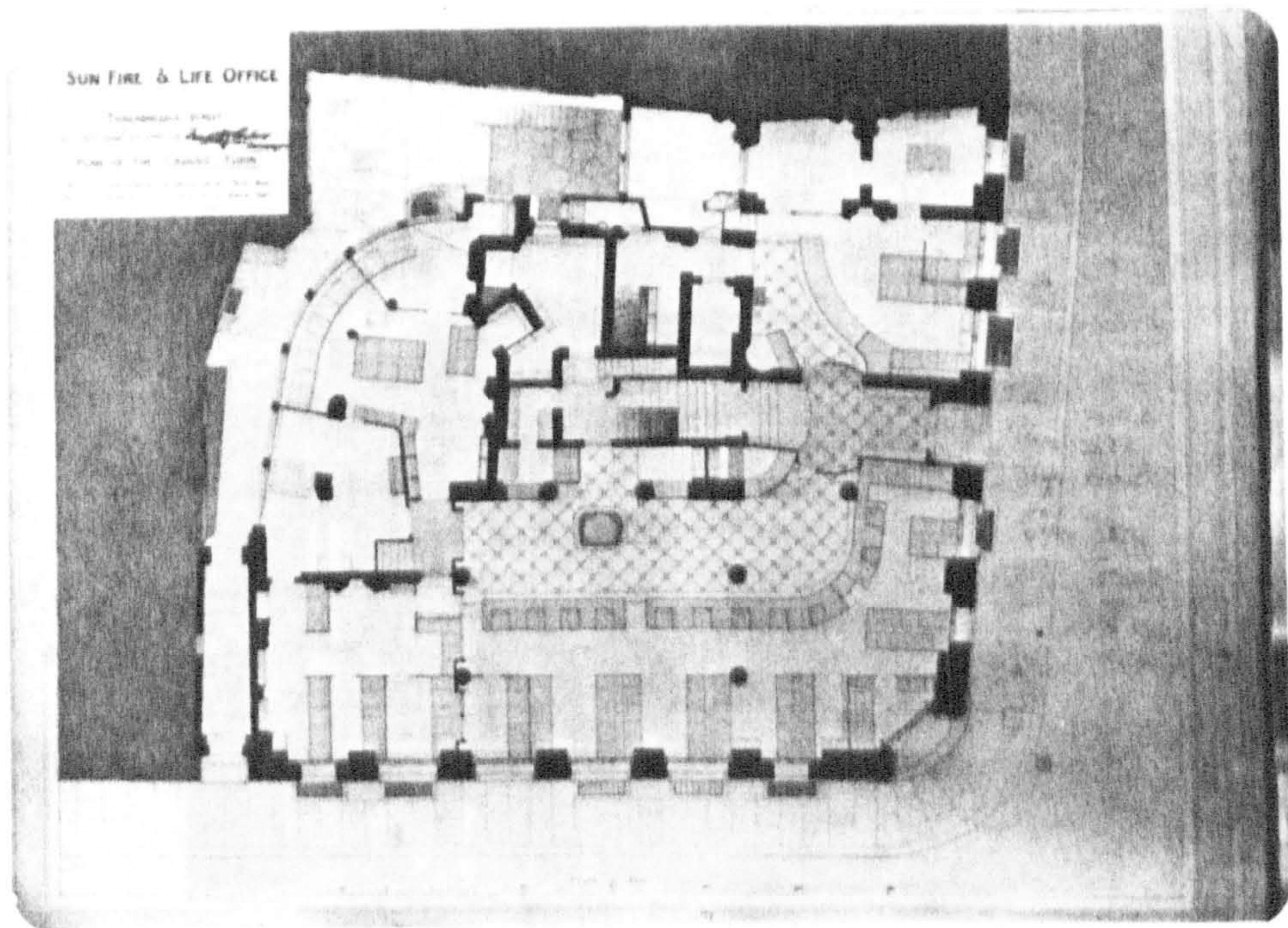


2-21

UNION BANK OF LONDON, City, 1866
SUN ASSURANCE CO., Westminster, 1867

2-22





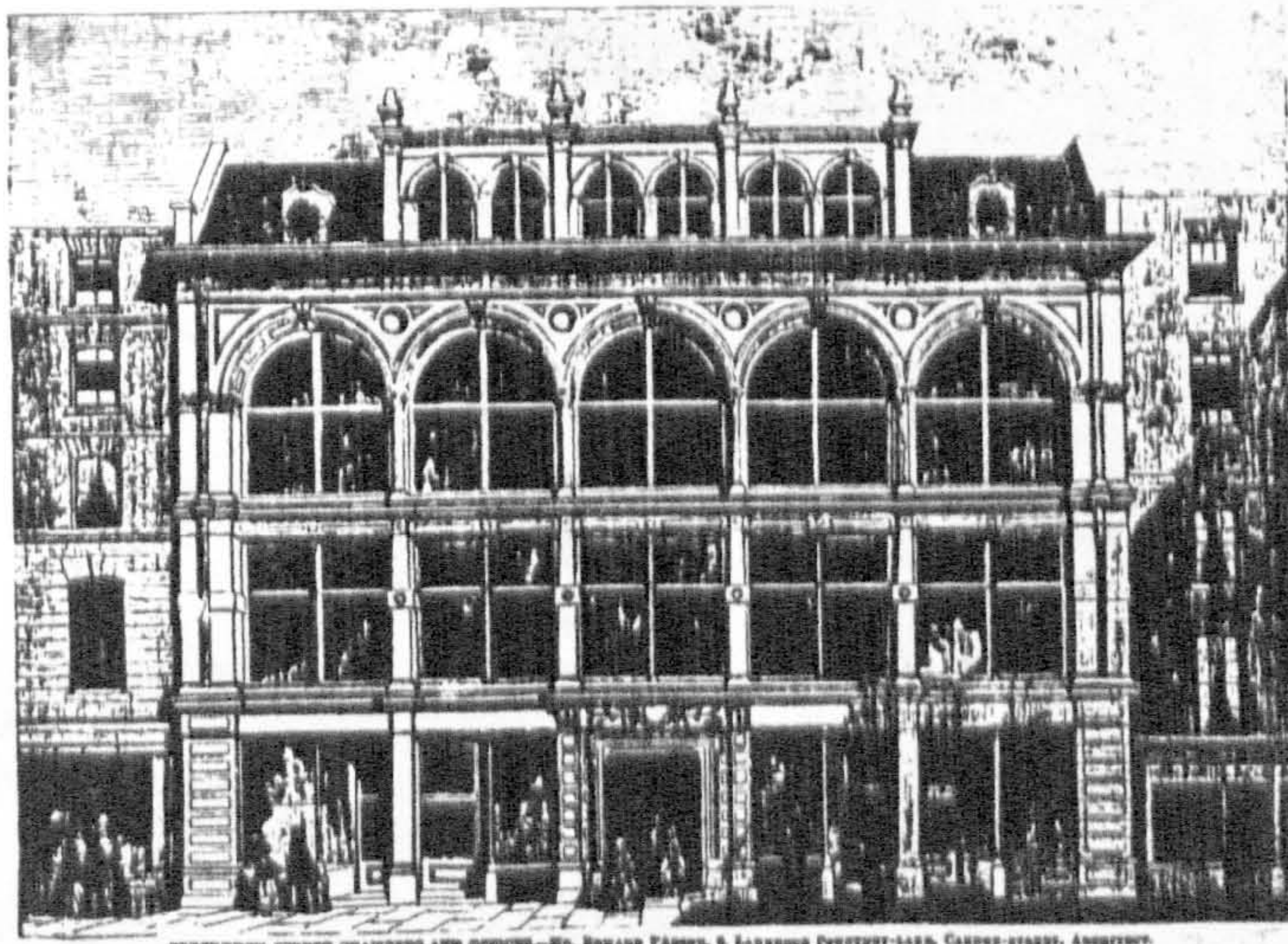
2-23

SUN ASSURANCE CO., City, 1888

SUN ASSURANCE CO., City, 1888

2-24





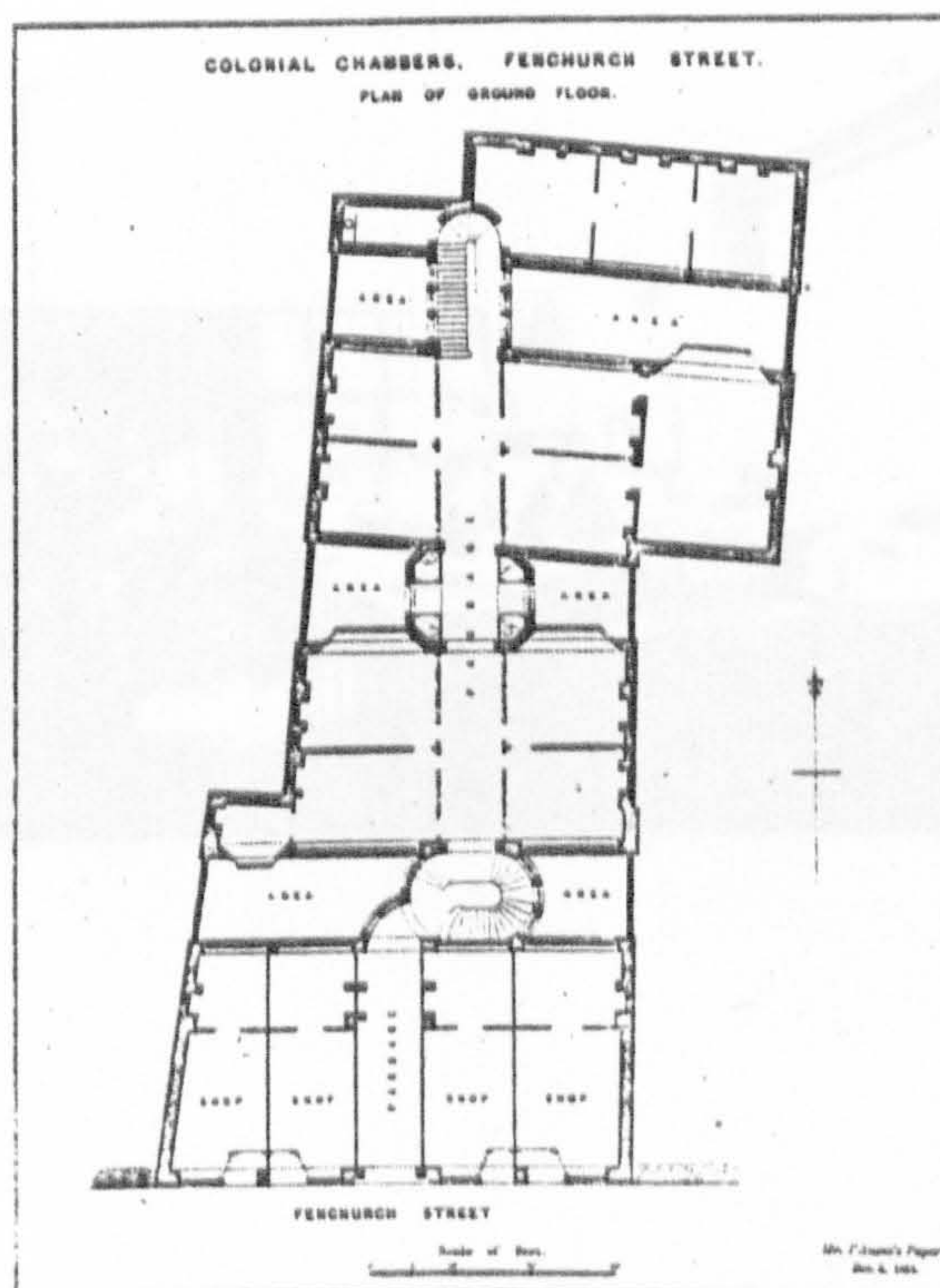
FENCHURCH STREET CHAMBERS AND OFFICE.—MR. HOWARD PARNER, & LAURENCE PROCTOR-LEIGH, CARPENTERS, ADEPTON.

2-25

COLONIAL CHAMBERS, City, 1857

COLONIAL CHAMBERS, City, 1857

2-26





2-27

ROYAL BANK OF SCOTLAND, City, 1877
PHOENIX ASSURANCE CO., City, ca. 1910

2-28

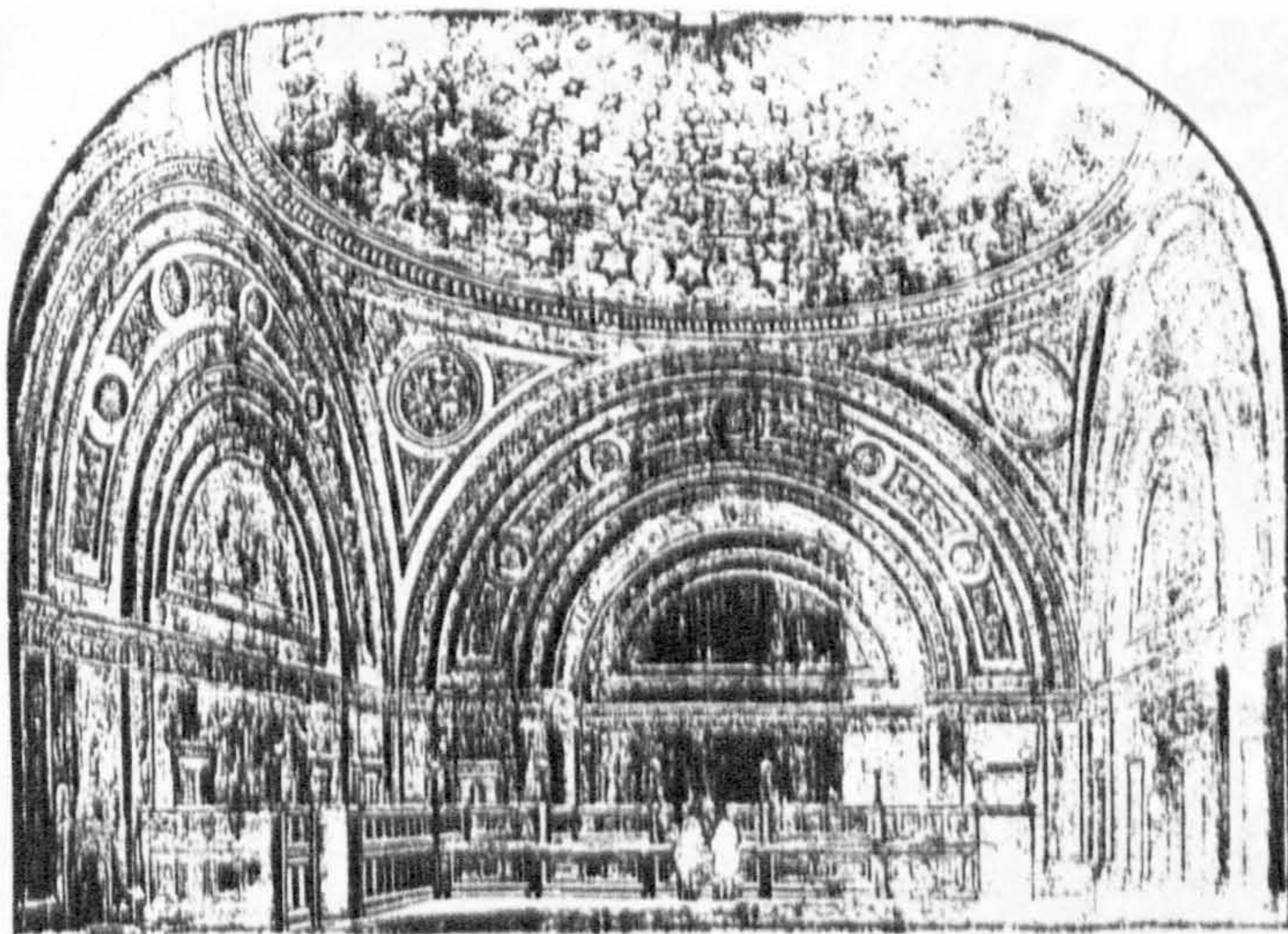




2-29

PHOENIX ASSURANCE CO., City, ca. 1910
ROYAL BANK OF SCOTLAND, Edinburgh, 1859

2-30



THE TELLING ROOM, ROYAL BANK OF SCOTLAND, EDINBURGH.—HARRIS FRASER AND KENNEDY, ARCHITECTS



2-31

BECKETT'S BANK, Leeds, 1863

LONDON AND WESTMINSTER BANK, City, 1867

2-32



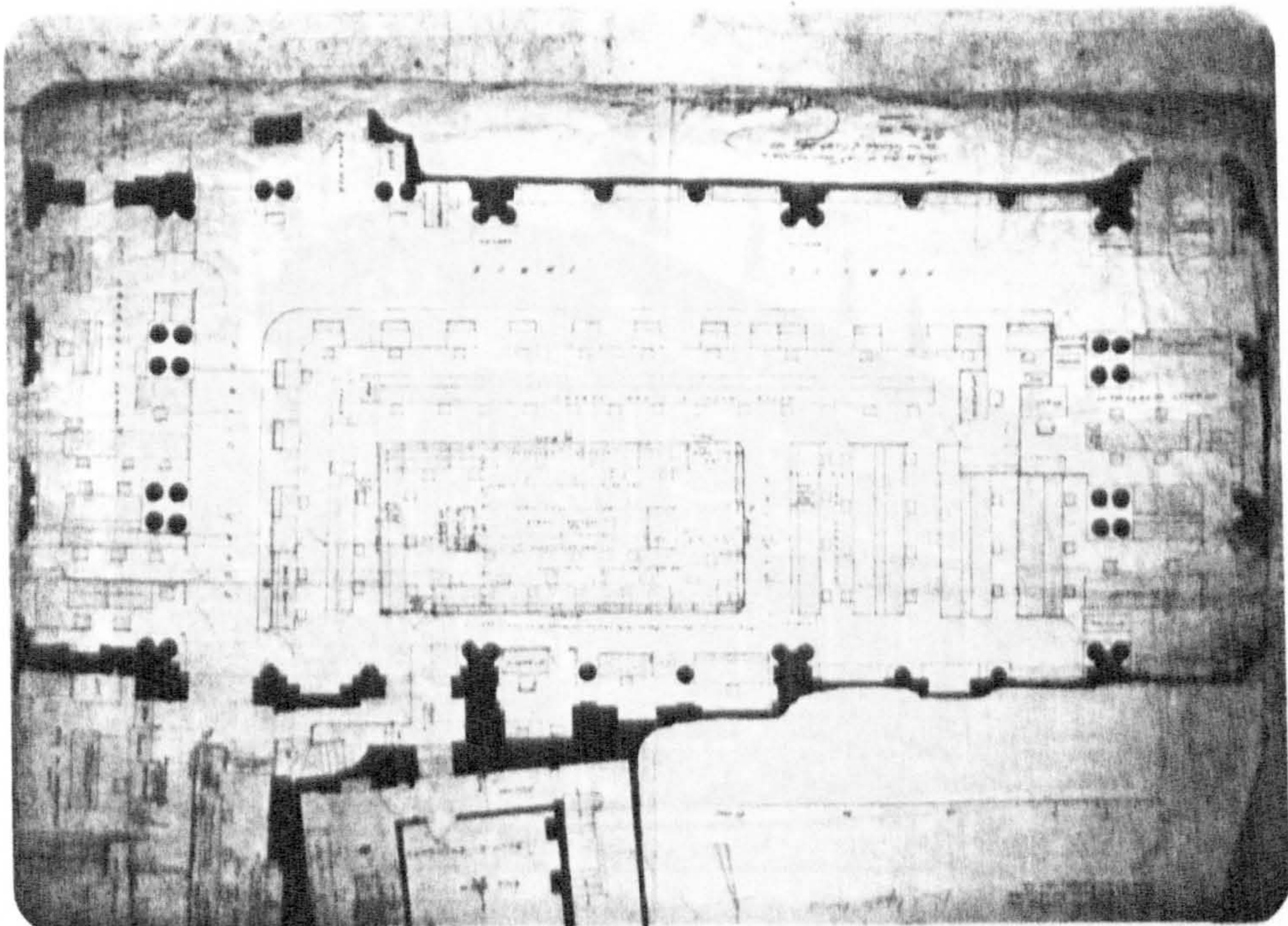


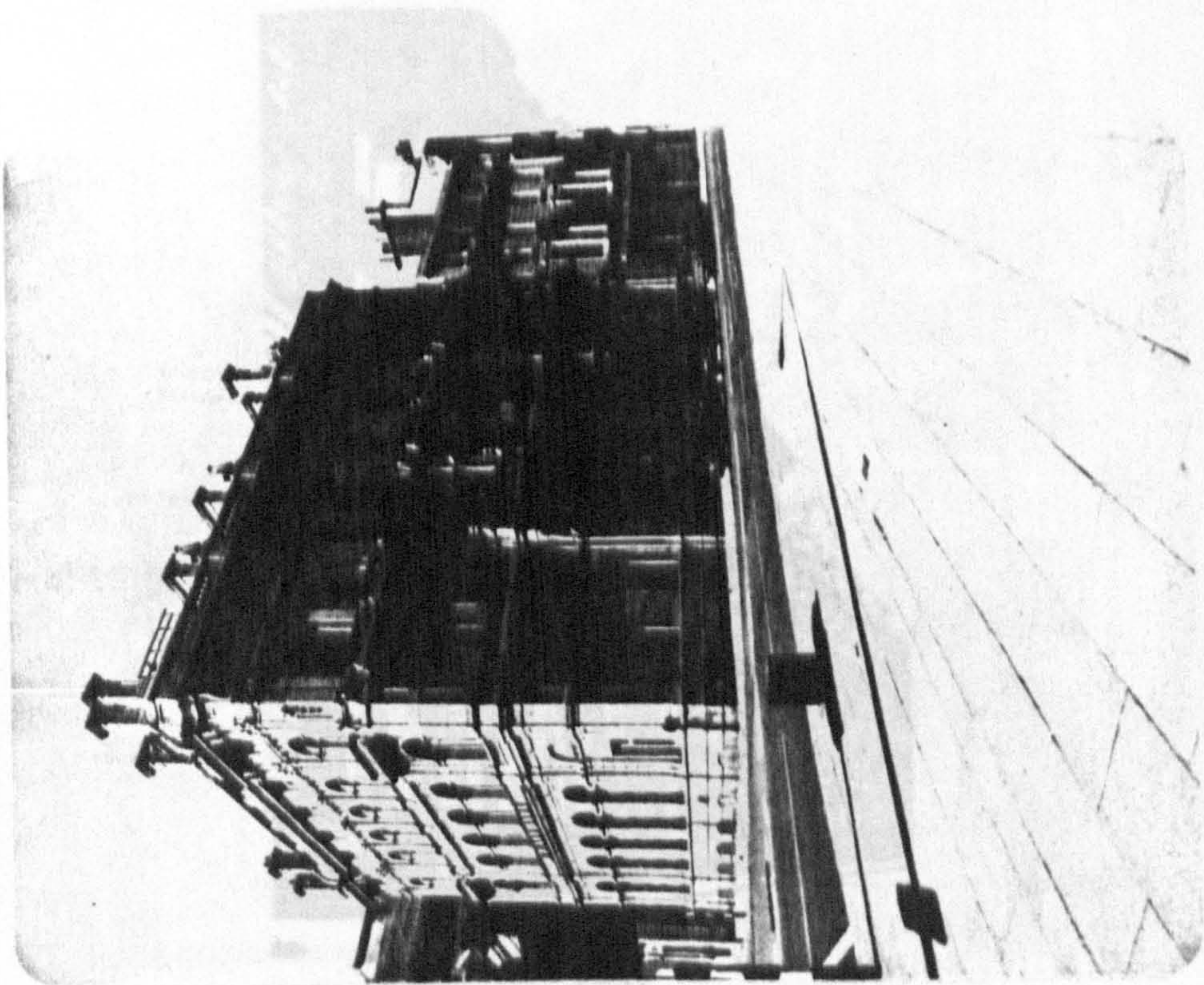
2-33

LANCASHIRE INSURANCE CO., Manchester, 1866

NATIONAL PROVINCIAL BANK, City, 1878

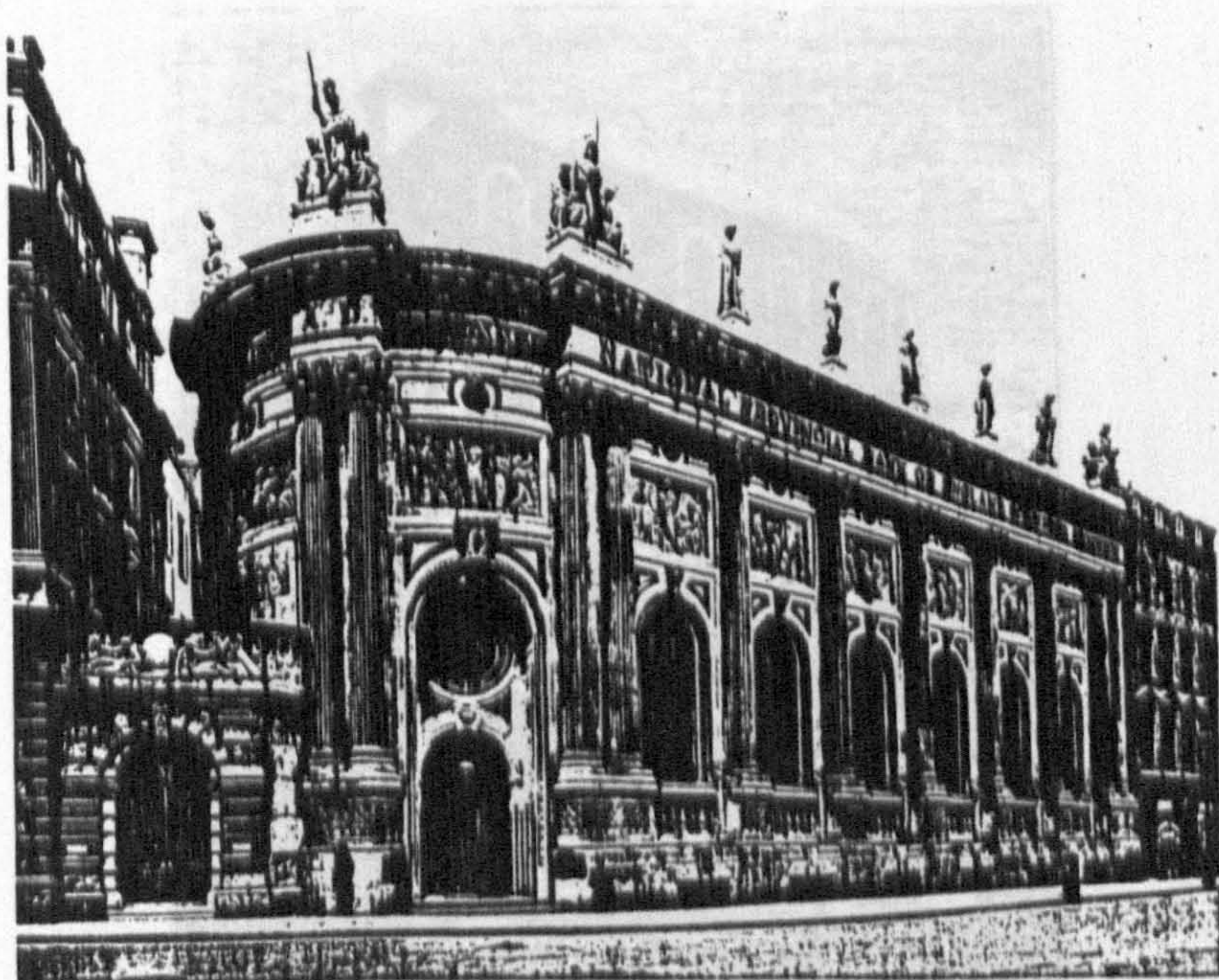
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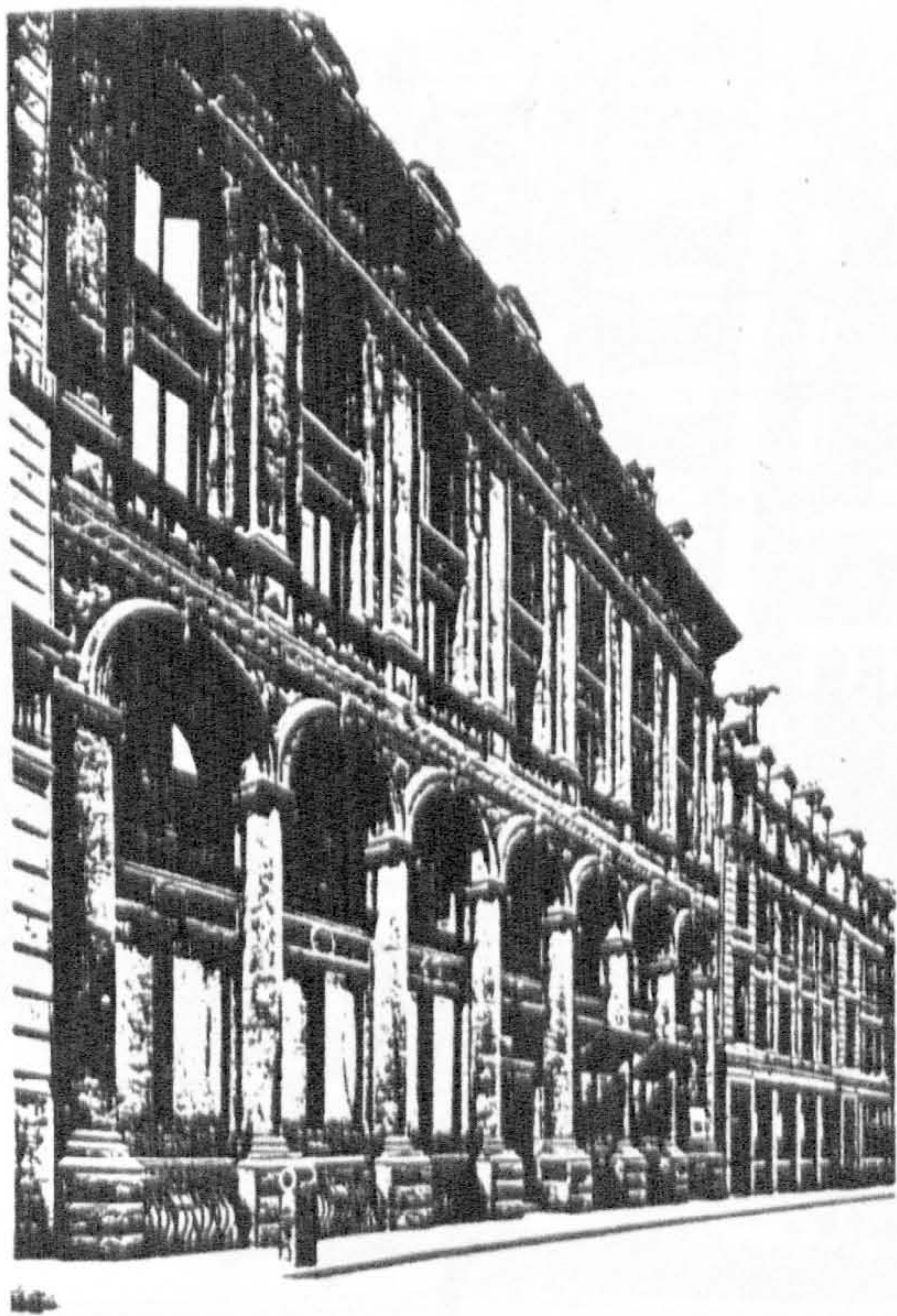




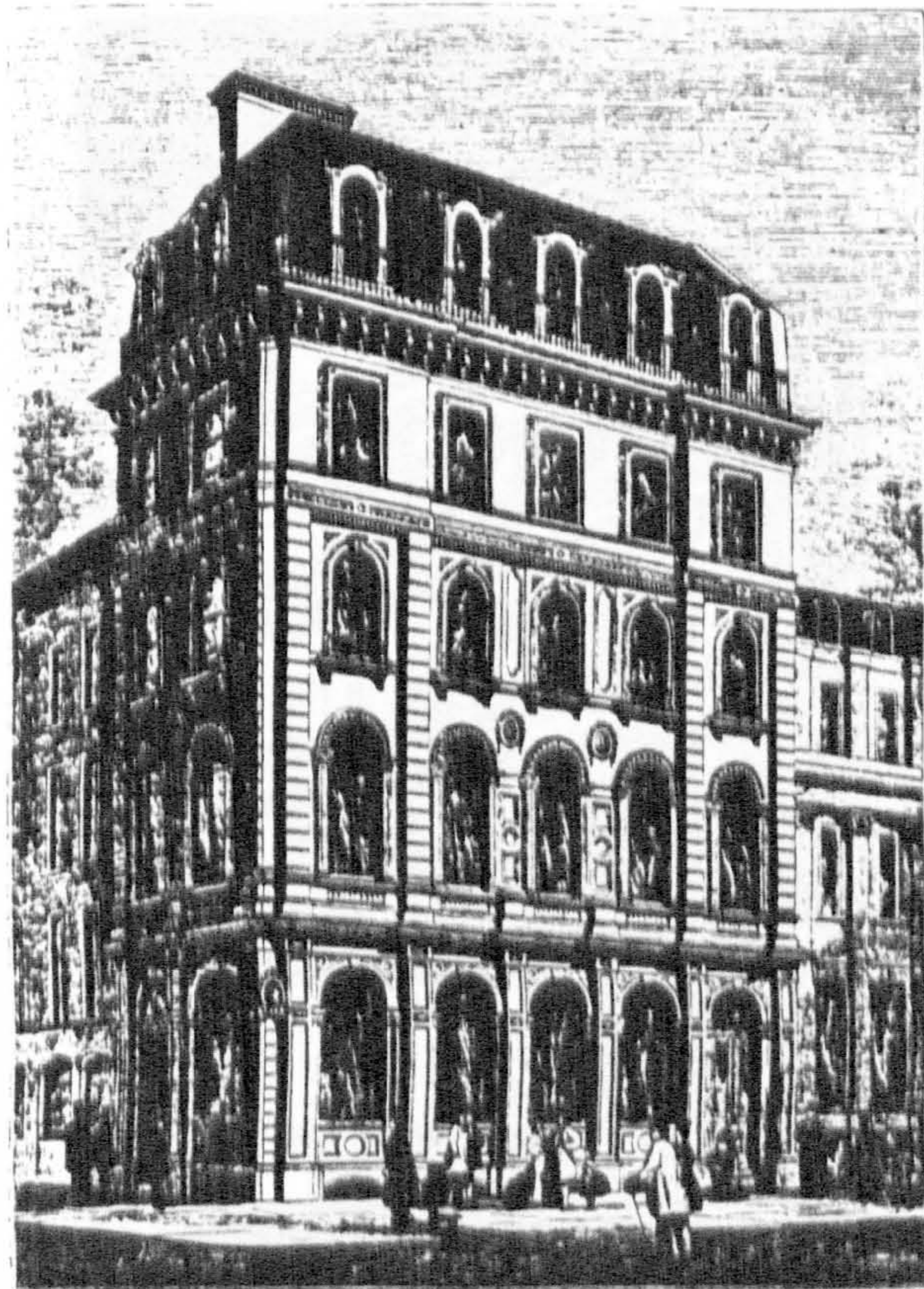
2-35

ALLIANCE BANK, Liverpool, 1869
NATIONAL PROVINCIAL BANK, City, 1863
2-36

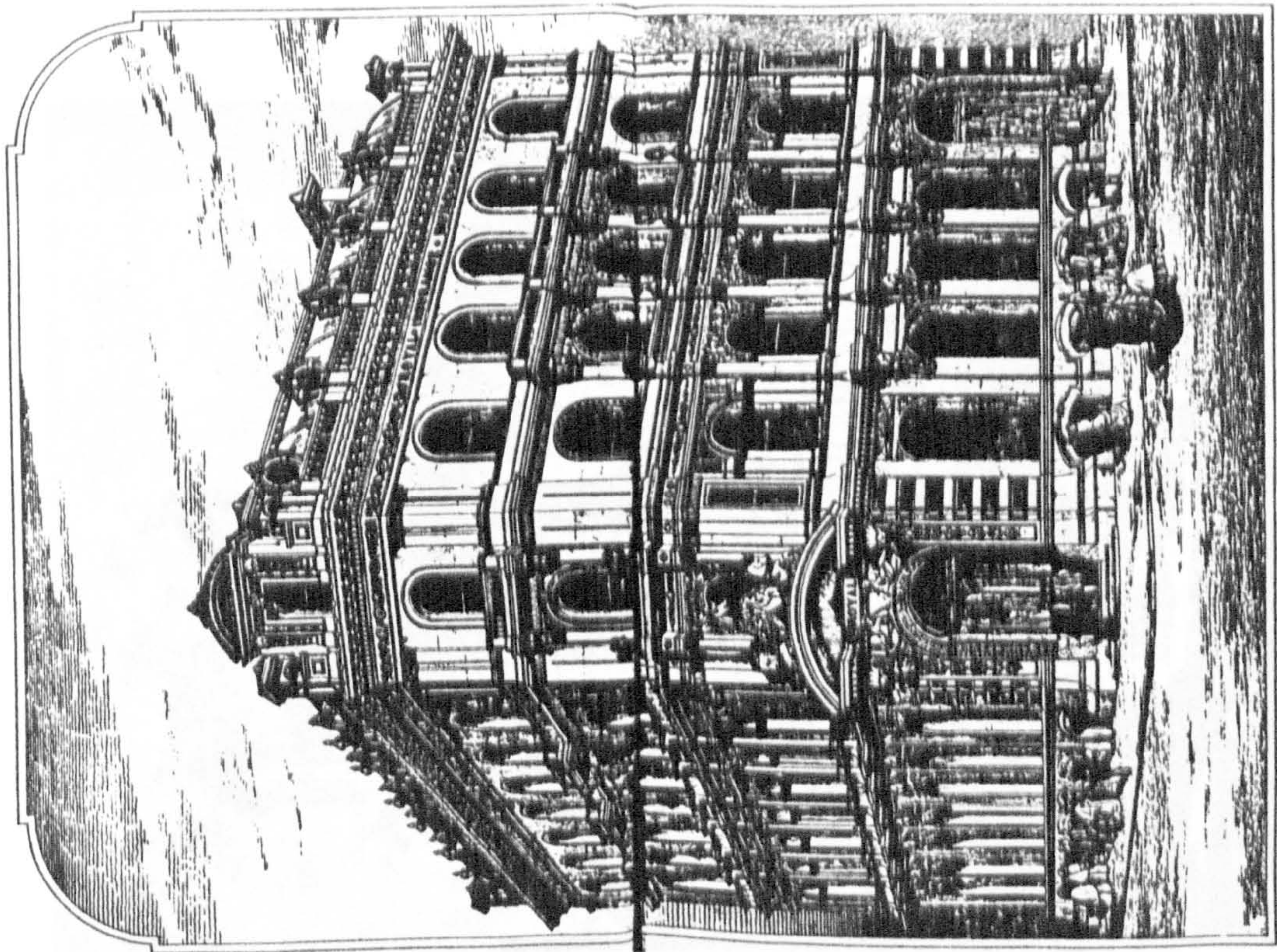




2-37
 ROYAL BANK OF SCOTLAND, City, 1877
 ROYAL INSURANCE CO., City, 1857
 2-38



OFFICES OF THE ROYAL INSURANCE COMPANY, LOMBARD-STREET.—MR. J. BELCHER, ARCHITECT.

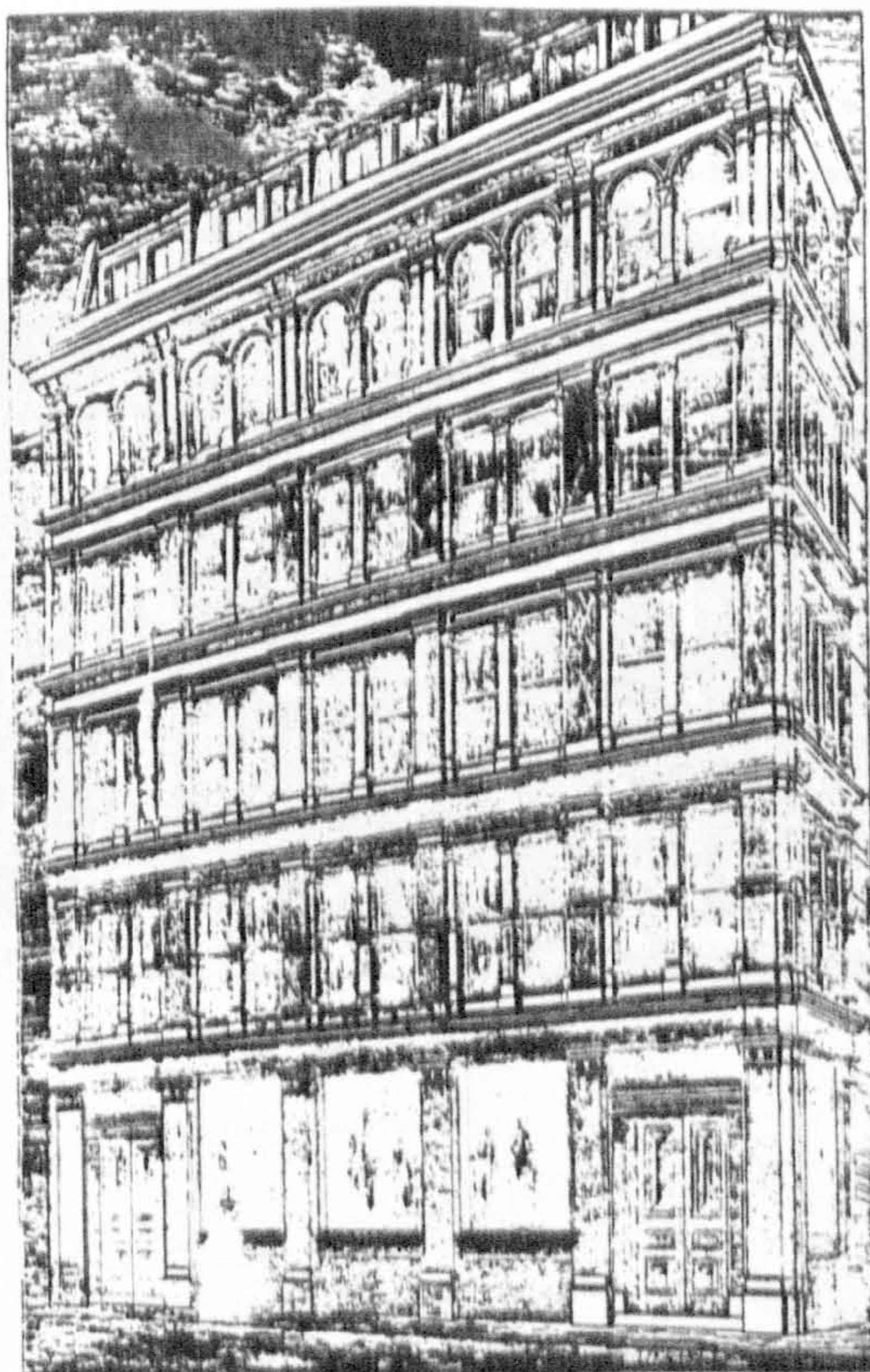


ROYAL INSURANCE BUILDINGS, LOMBARD ST. — J. & J. BELCHER, ARCHT. (39)

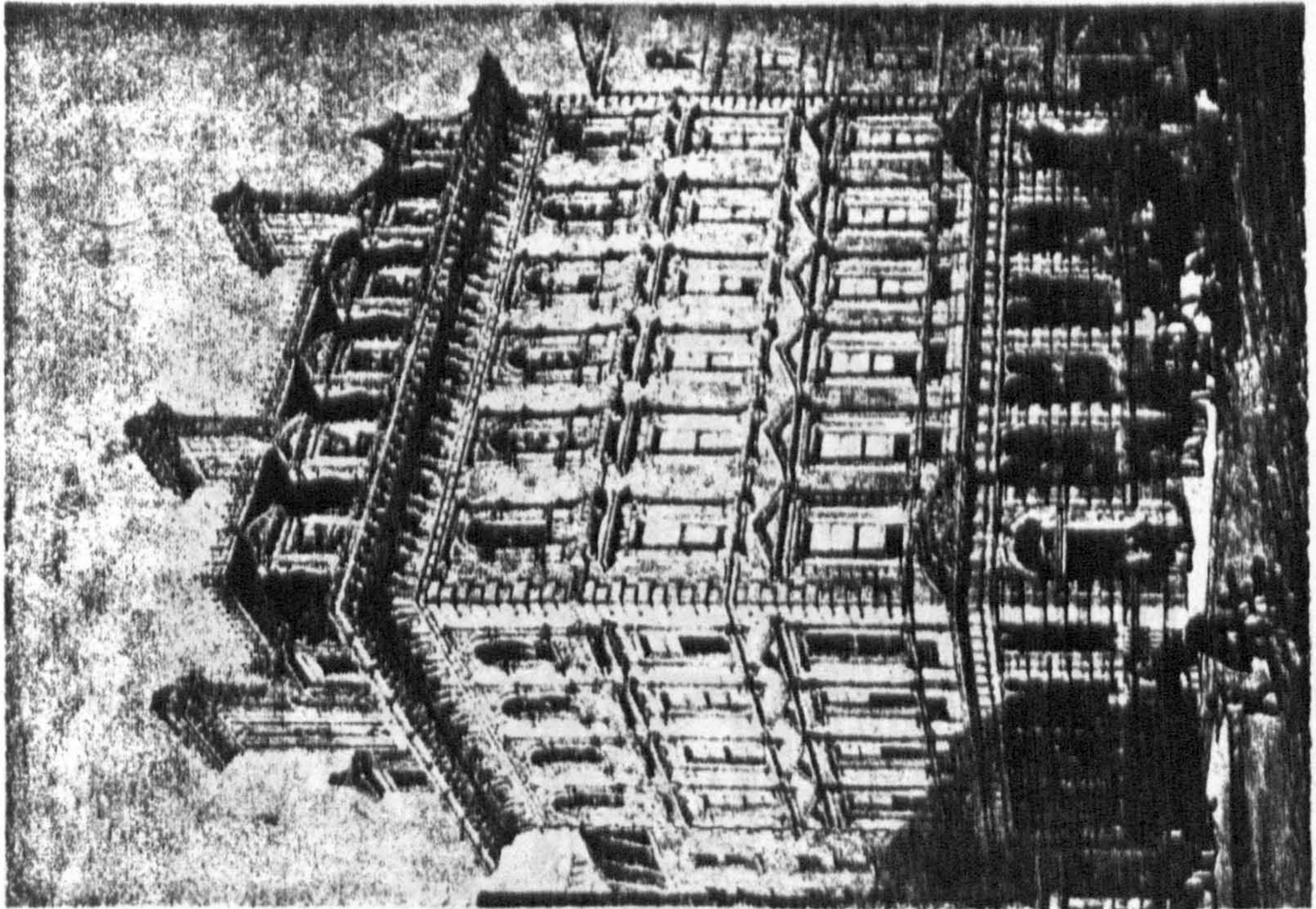
2-39

ROYAL INSURANCE CO., City, 1866
42 CORNHILL, City, 1877

2-40



STREET ARCHITECTURE: No. 42, CORNHILL. — Mr. BELCHER, ARCHT.



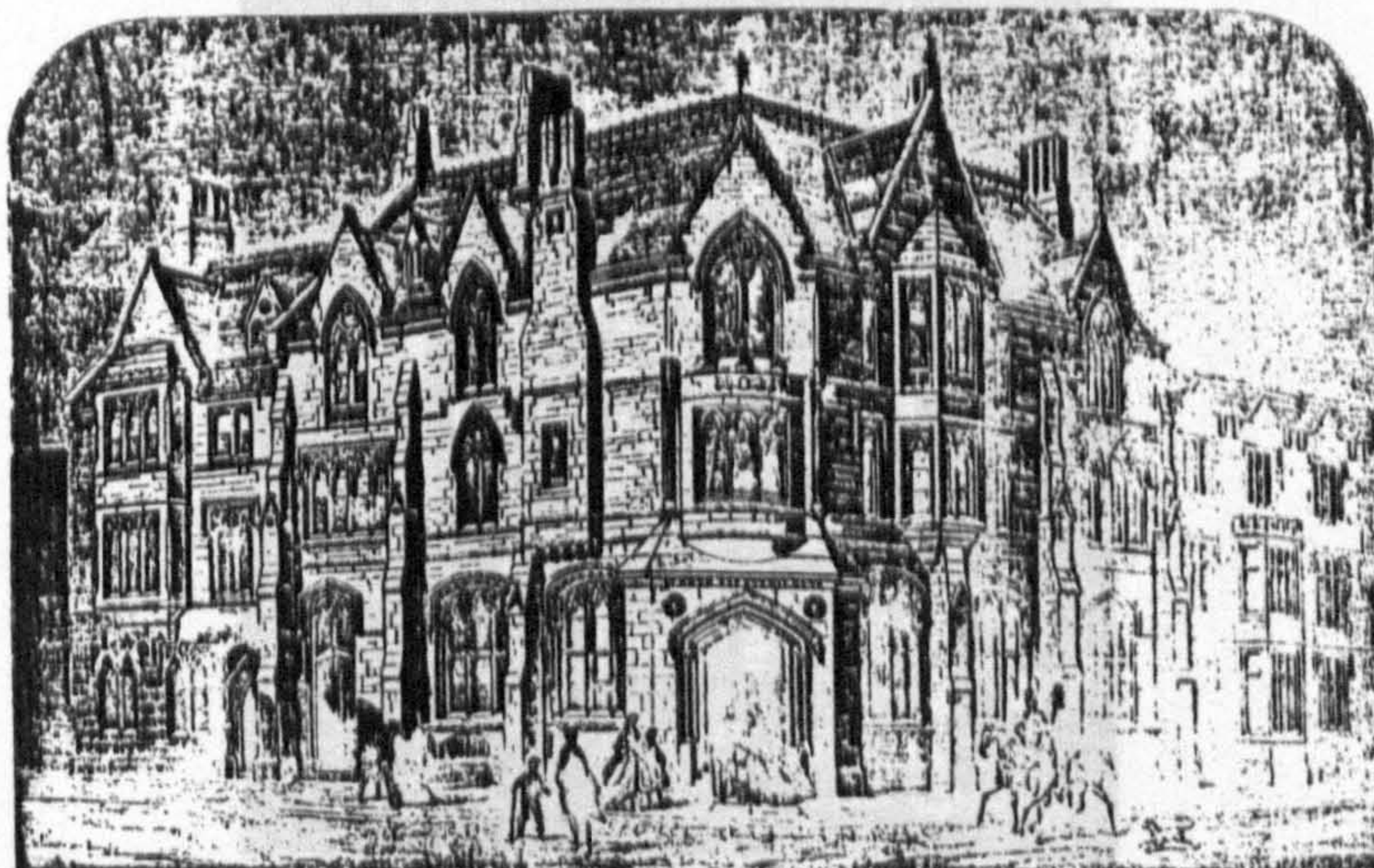
2-41

NATIONAL DISCOUNT CO., City, 1857 1866

UNION BANK OF LONDON, City, 1868 1872

2-42



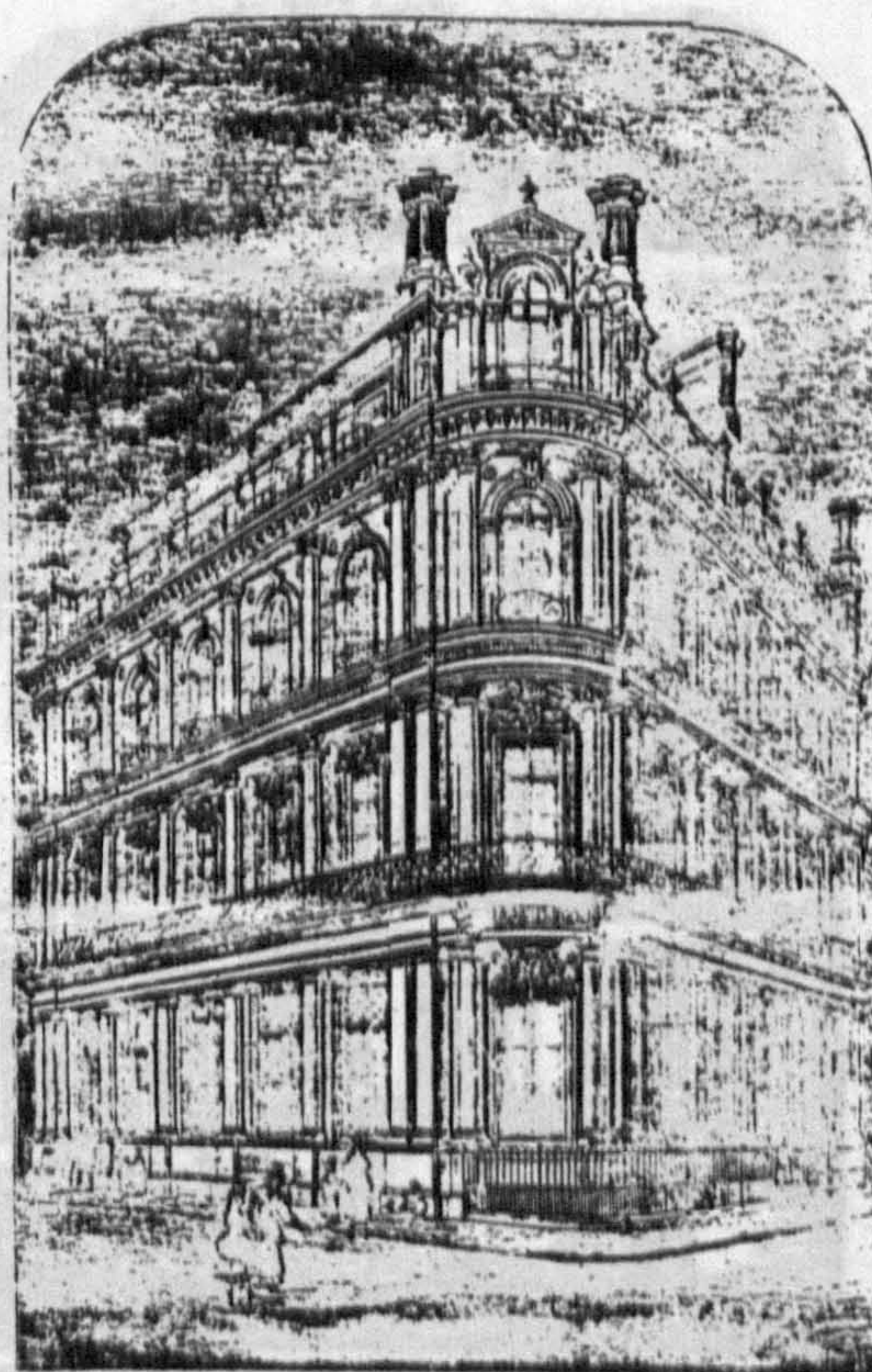


LONDON AND COUNTY BANK, CAMBRIDGE.—Moses & H. Francis, Architects.

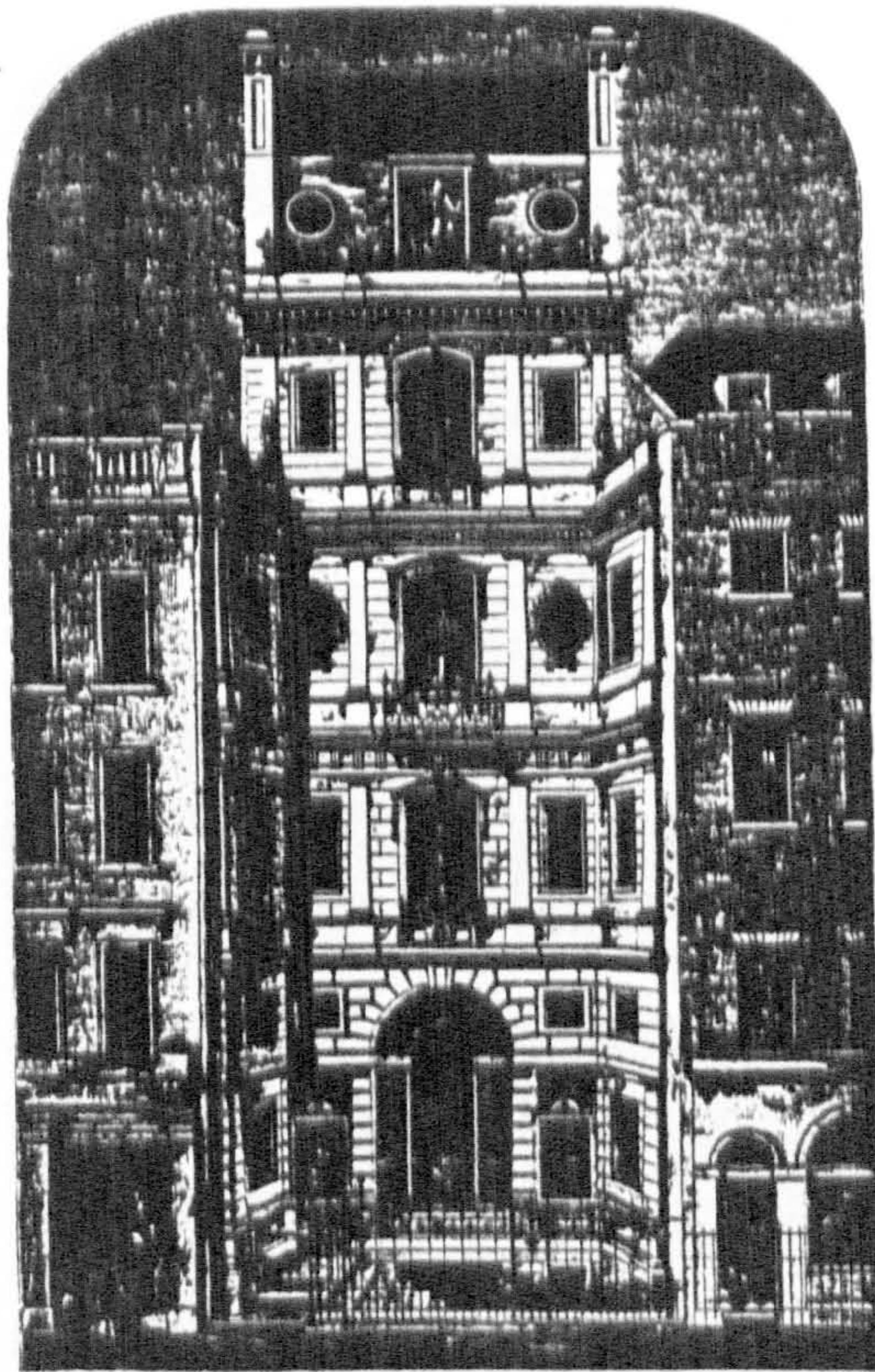
2-43

LONDON AND COUNTY BANK, Cambridge, 1866
 NORTH BRITISH UNION BANK OF LONDON, Westminster, 1872

2-44



UNION BANK OF LONDON: CHARING CROSS BRANCH.—MR. FREDERICK W. PUGH, ARCHT.



LONDON AND PROVINCIAL LAW LIFE ASSURANCE COMPANY, FLEET-STREET.—MR. JOHN SEAN, ARCHT.

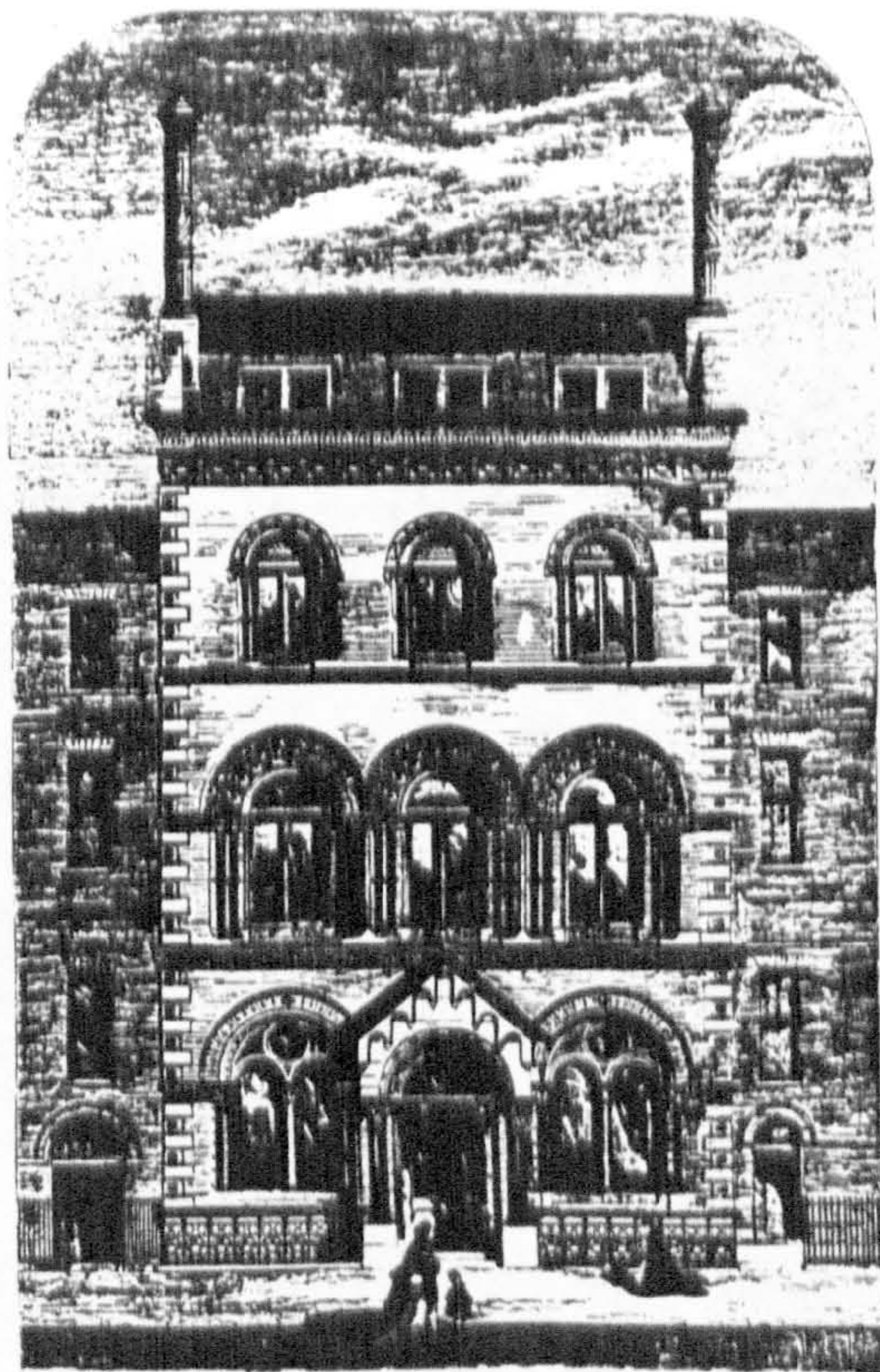
2-45

LONDON AND PROVINCIAL LAW LIFE, City, 1855
NORTH BRITISH AND MERCANTILE INSURANCE OFFICES, City, 1864

2-46



THE NORTH BRITISH AND MERCANTILE INSURANCE OFFICES, THREADNEEDLE-STREET, LONDON.
MR. THOMAS PIERCE AND MR. J. S. GOSWELL, ARCHT.

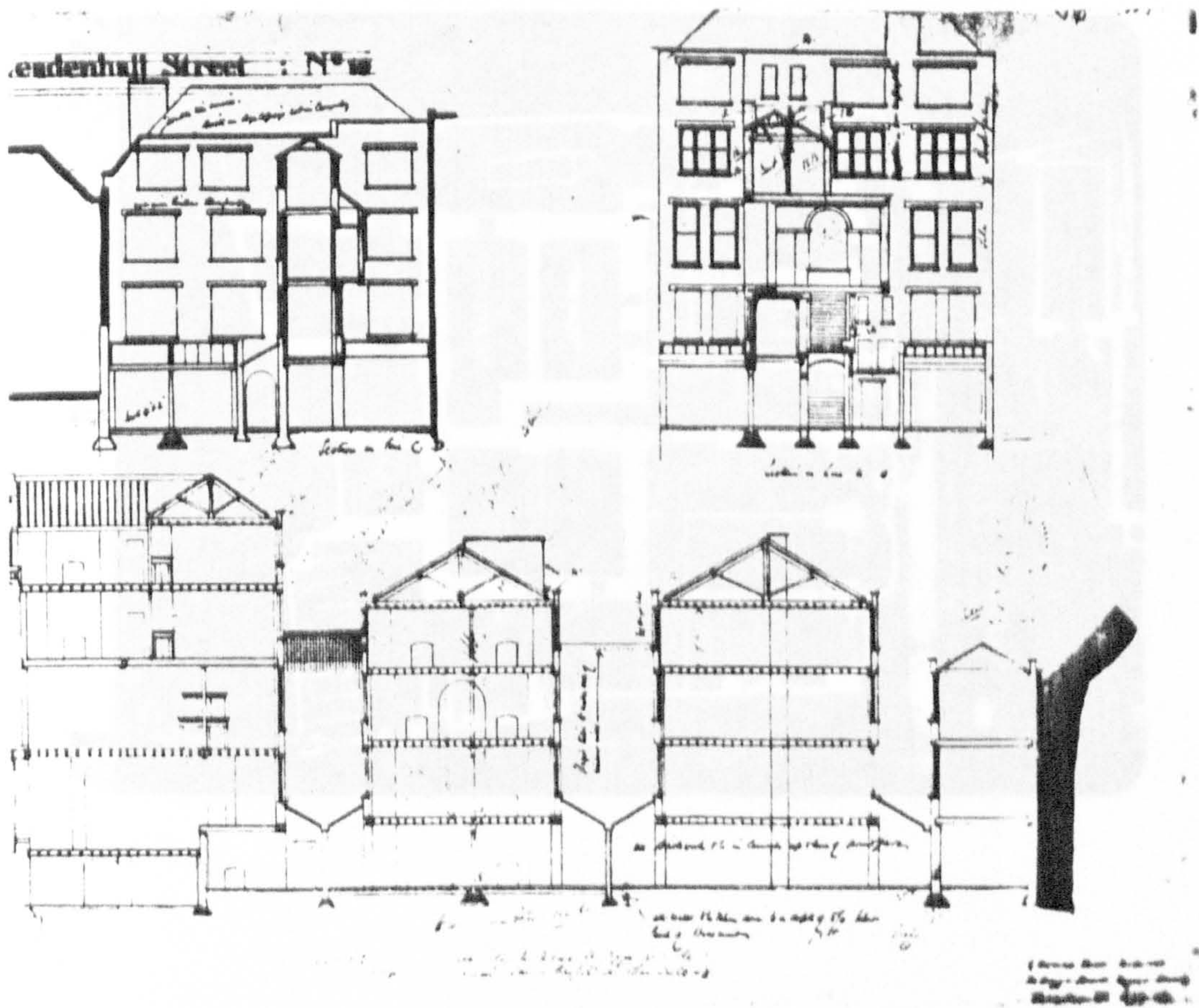


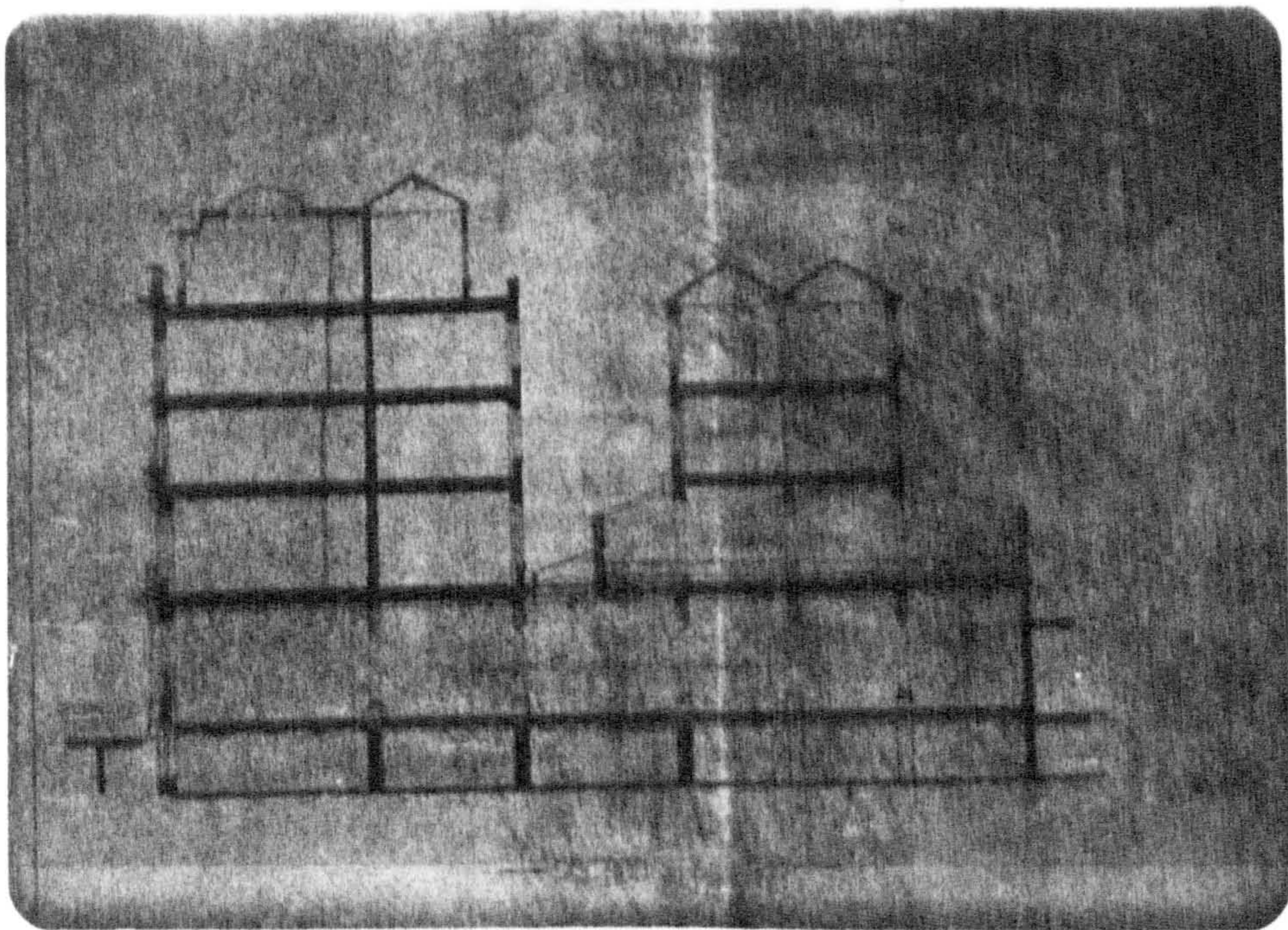
THE ECONOMIC LIFE ASSURANCE COMPANY'S OFFICE, BRIDGE STREET, BLACKFRIARS.
Mr. JOHN CHAMBERLAIN, ARCHT.

2-47

ECONOMIC LIFE ASSURANCE CO., City, 1874
NEW ZEALAND CHAMBERS, City, 1871

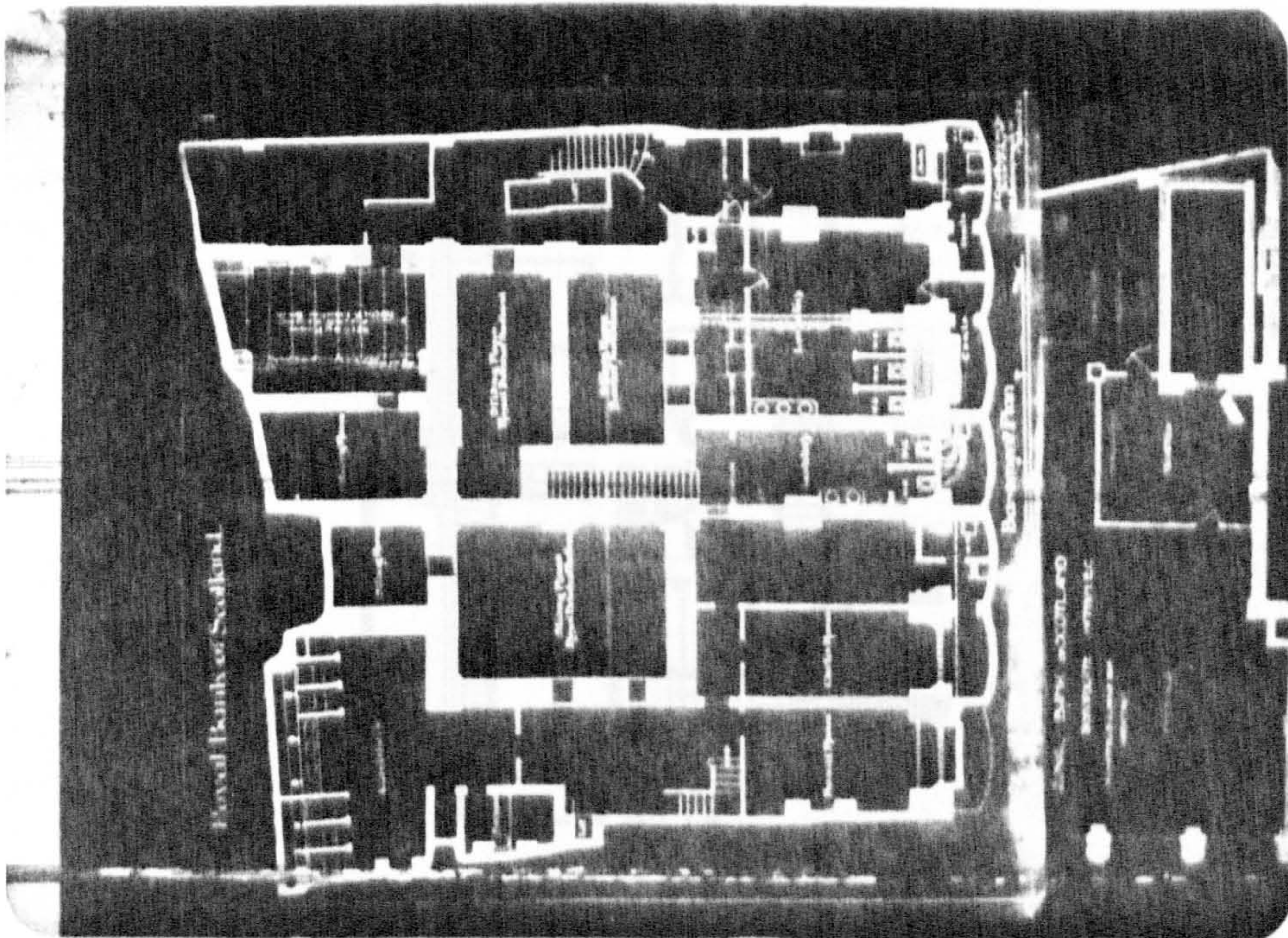
2-48





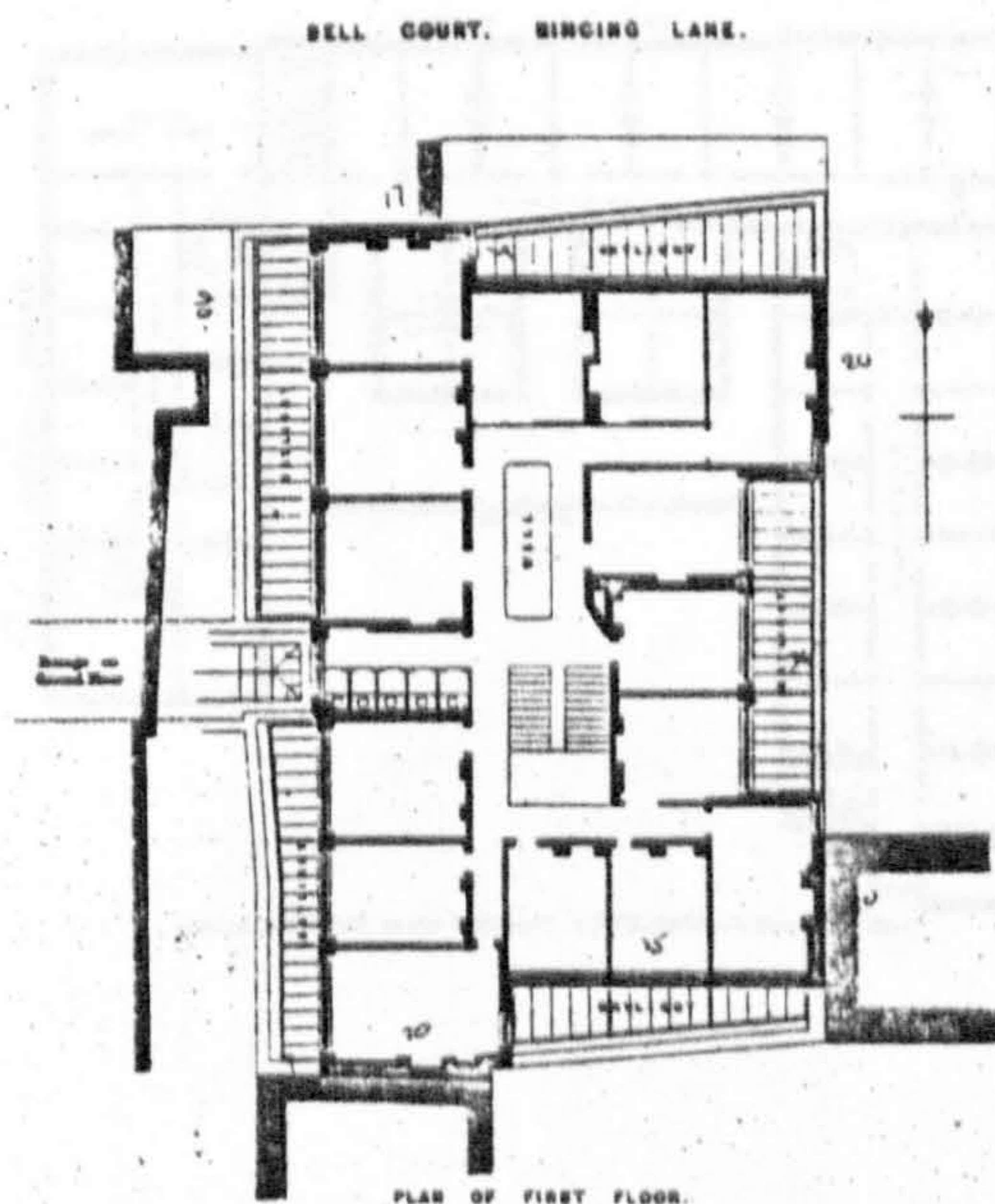
2-49

37-39 LOMBARD ST., City, 1866
 ROYAL BANK OF SCOTLAND, City, 1877
 2-50



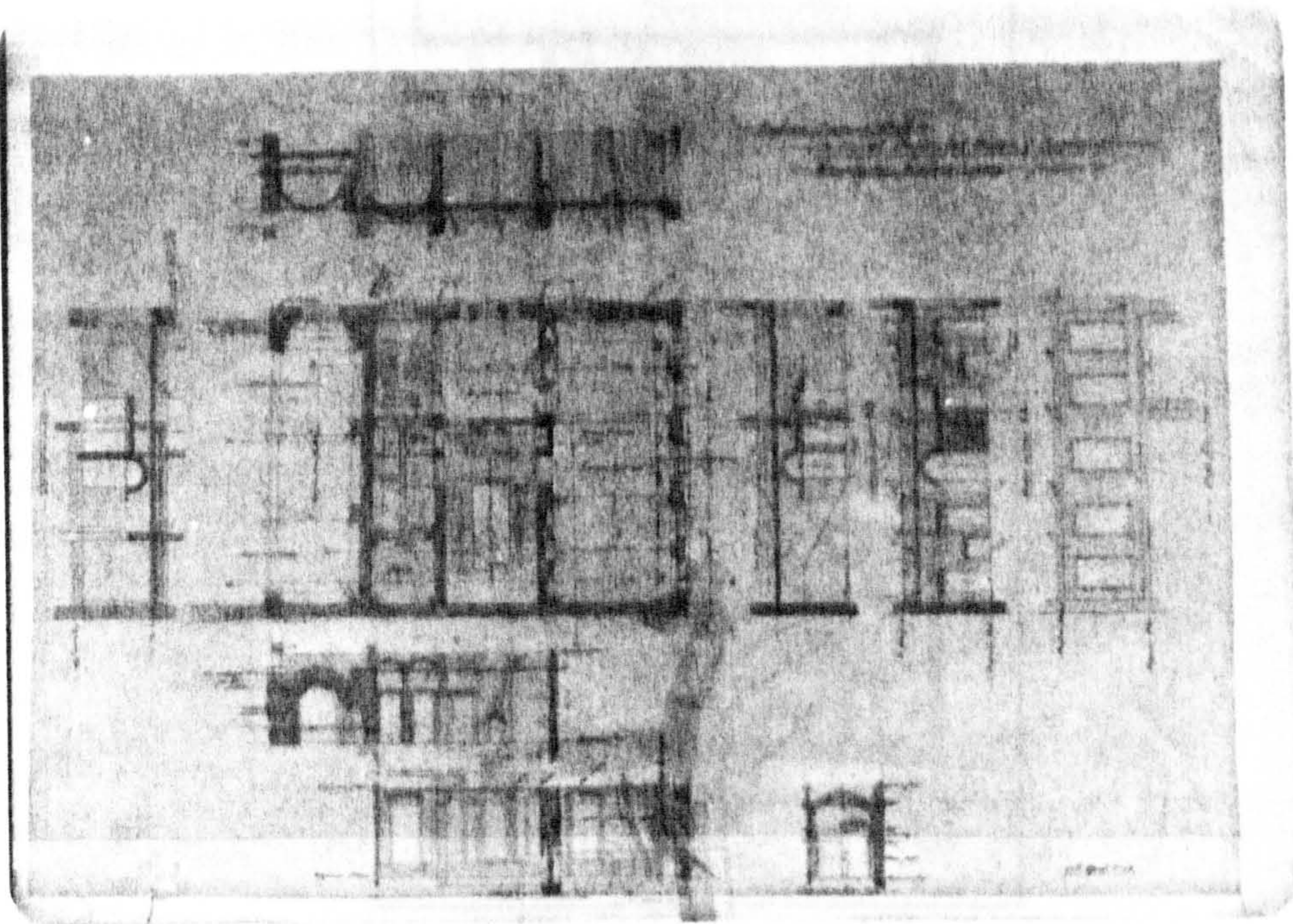


2-51
9 MINCING LANE, City, 186-
BELL COURT, City, 186-
2-52



Mr. Fox's Papers
Dec. 6, 1866

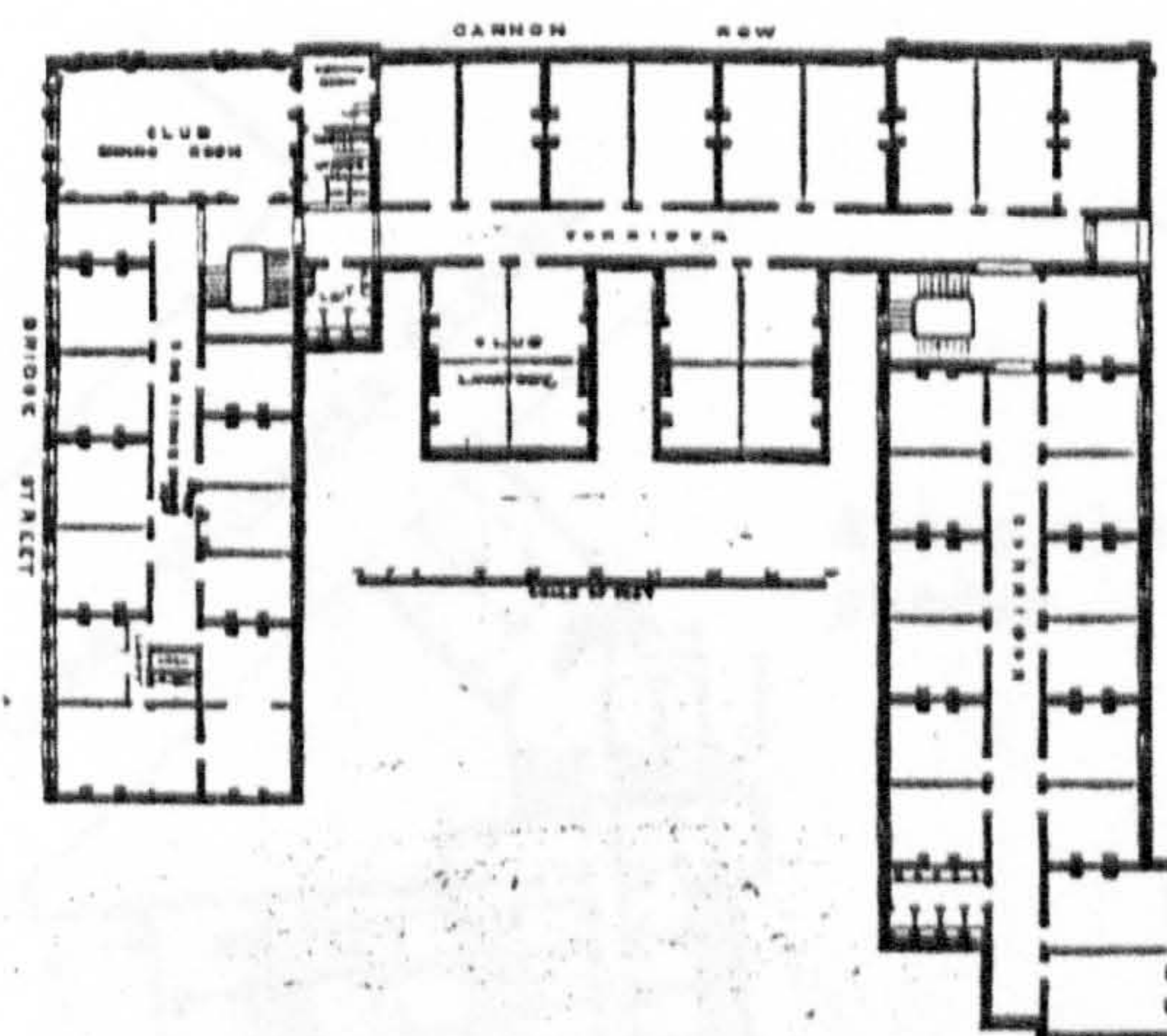
Scale of Feet.
1 2 3 4 5 6 7 8 9 10



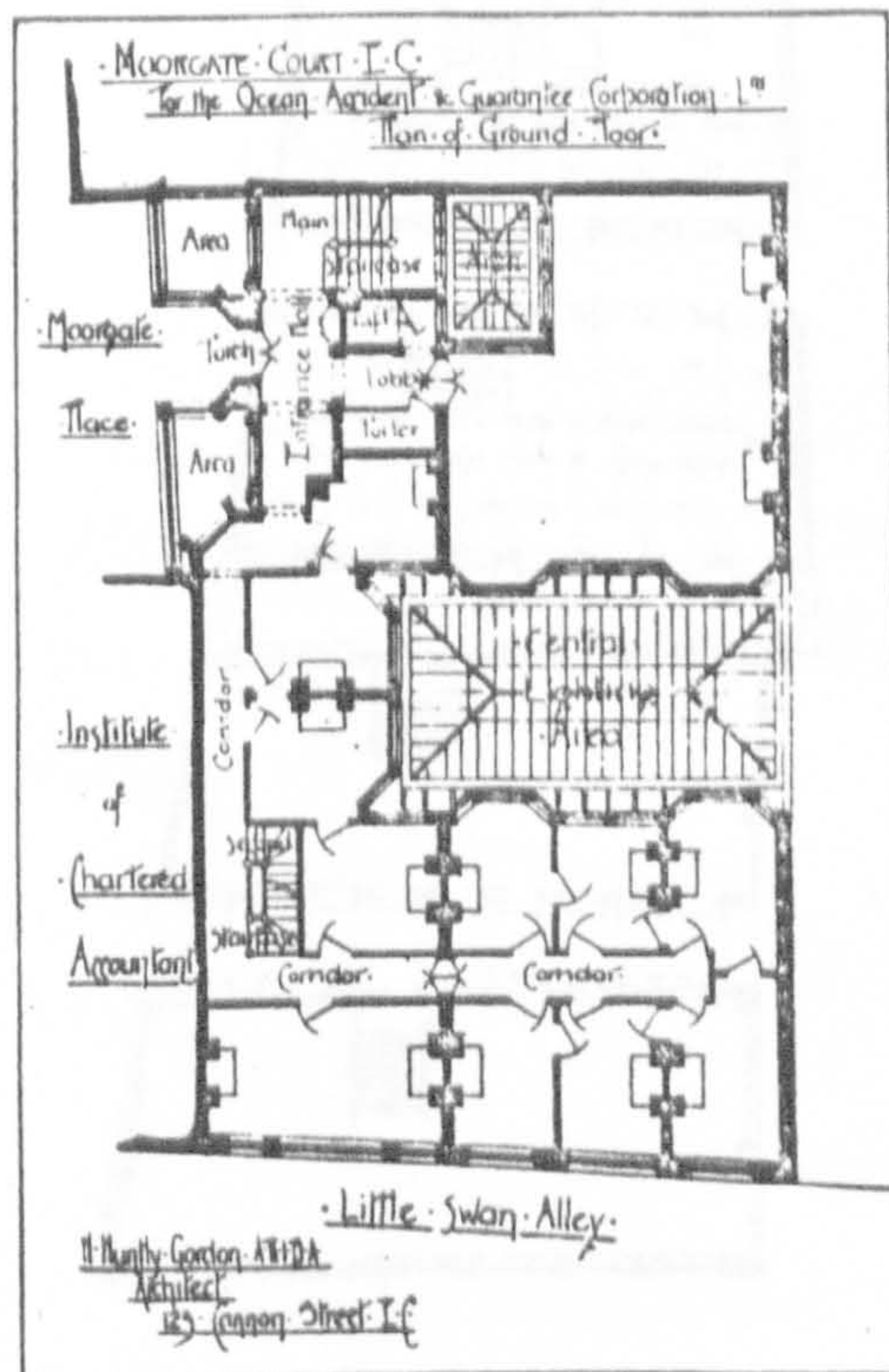
2-53

NATIONAL PROVINCIAL BANK, City, 1863
PALACE CHAMBERS, Westminster, 1878

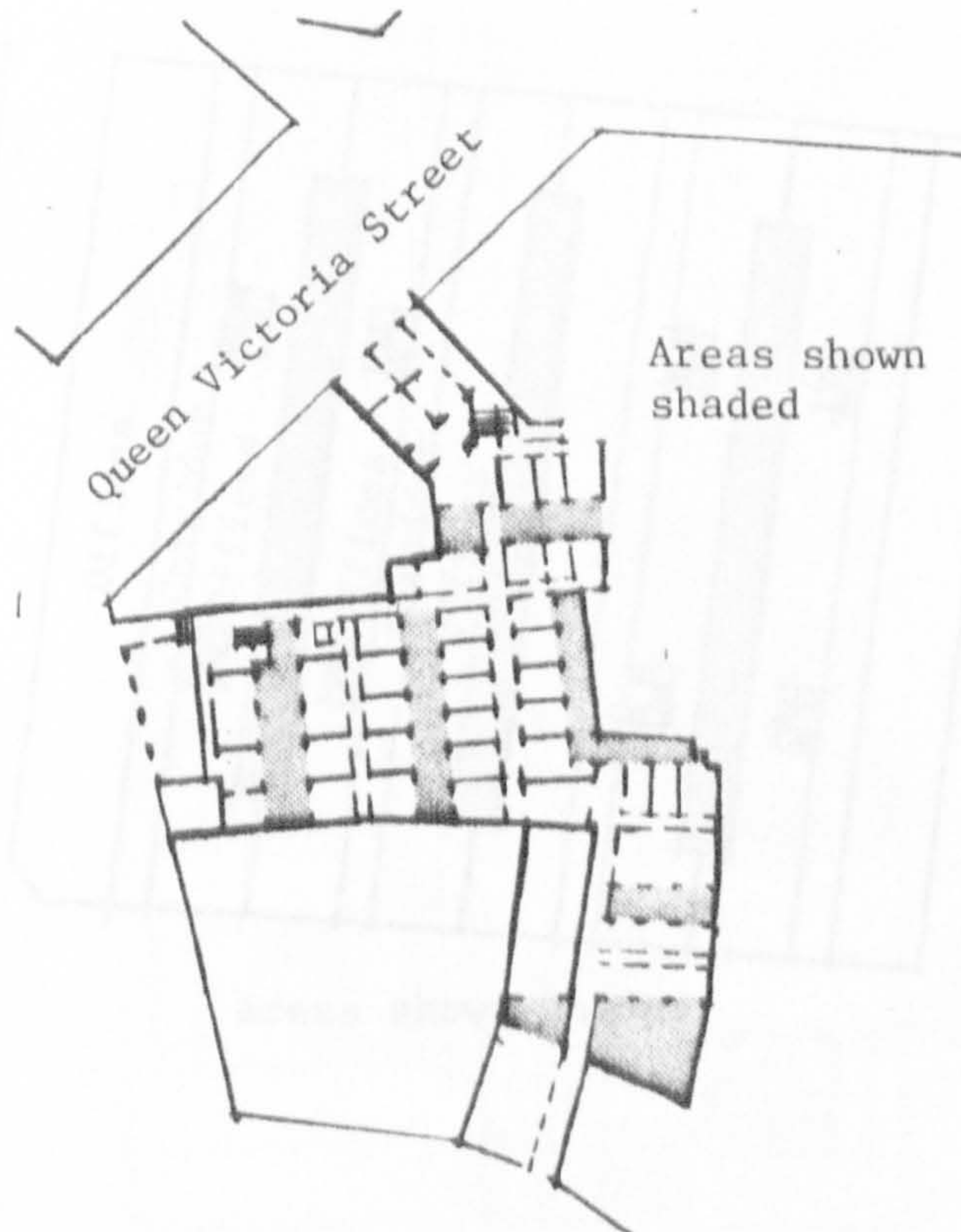
2-54

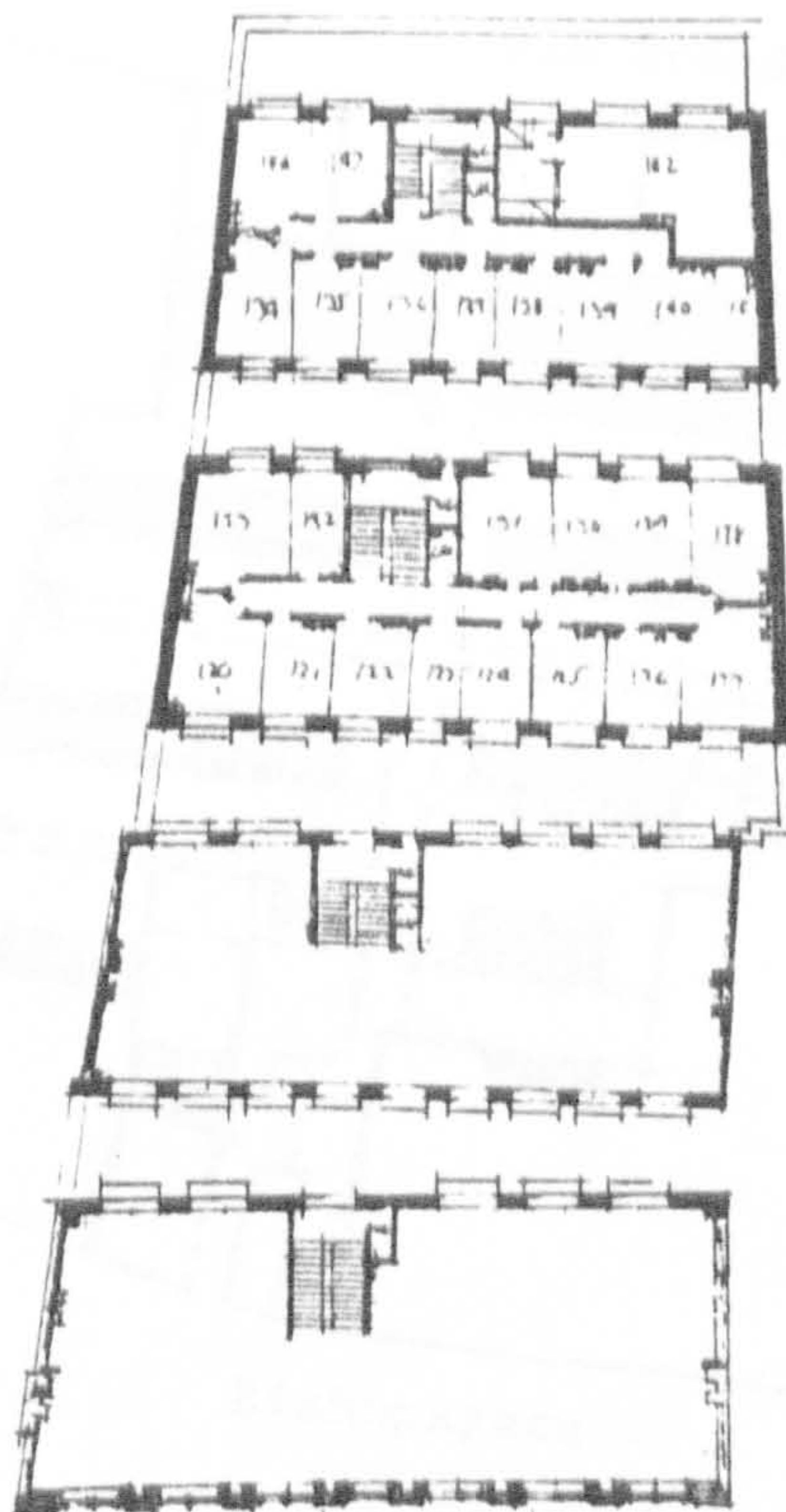


PALACE CHAMBERS, SAINT STEPHEN'S, WESTMINSTER.—Plan of First Floor.

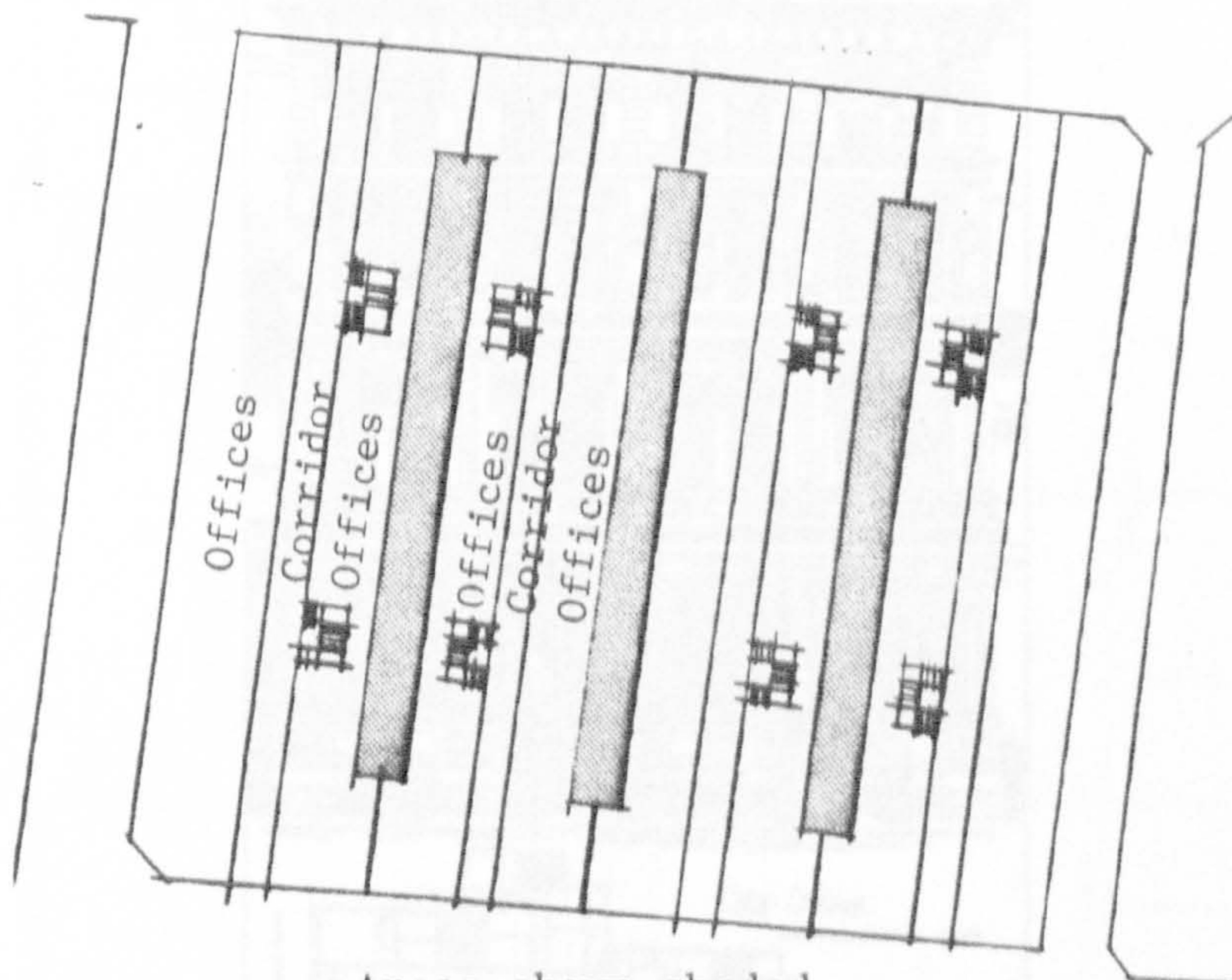


2-55
MOORGATE COURT, City, 1895
MANSION HOUSE CHAMBERS, City, n.d.
2-56

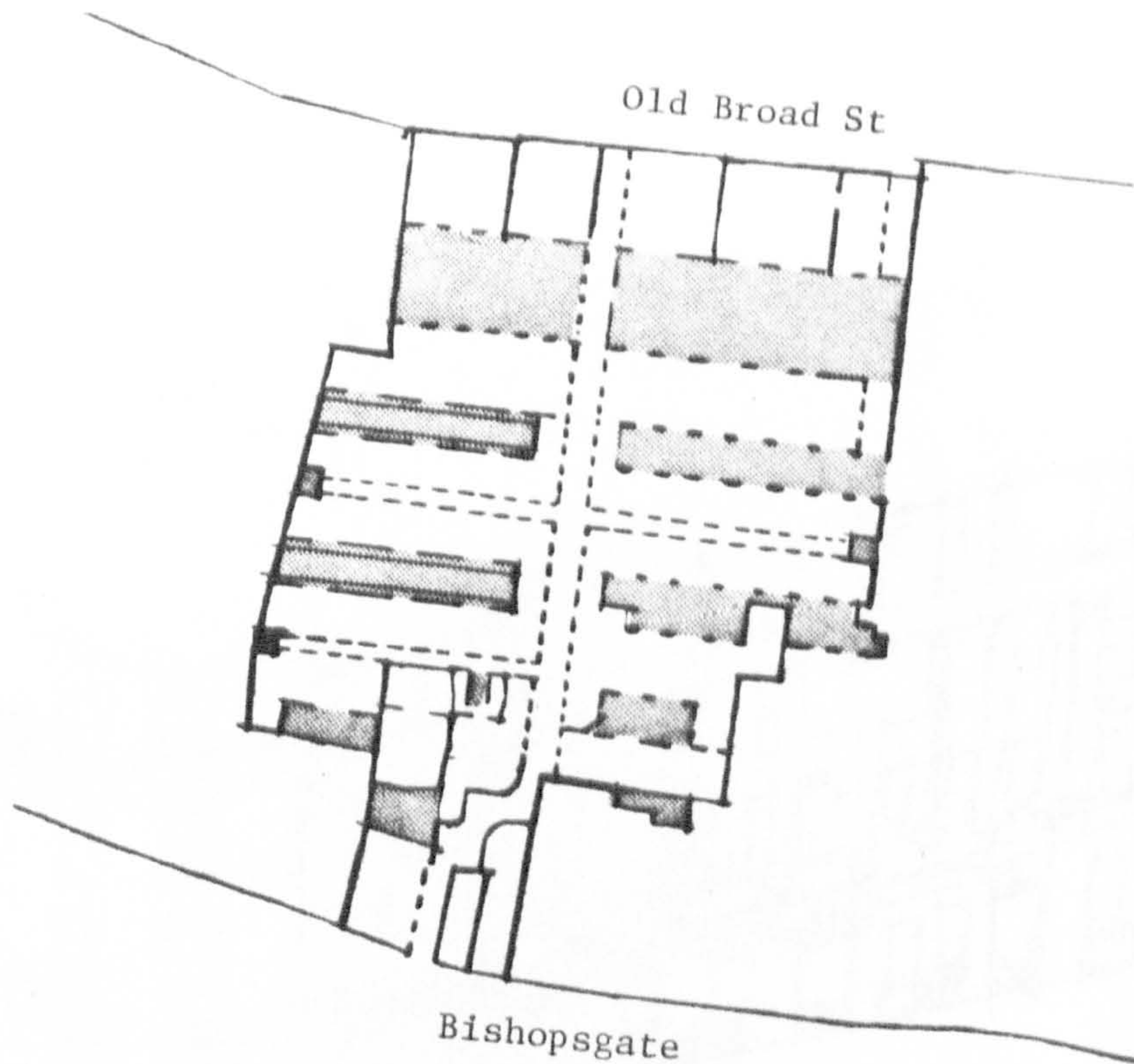




2-57
 9 MINCING LANE, City, 186-
 GREAT WINCHESTER STREET BUILDINGS, City, 186-
 2-58



Areas shown shaded



Bishopsgate

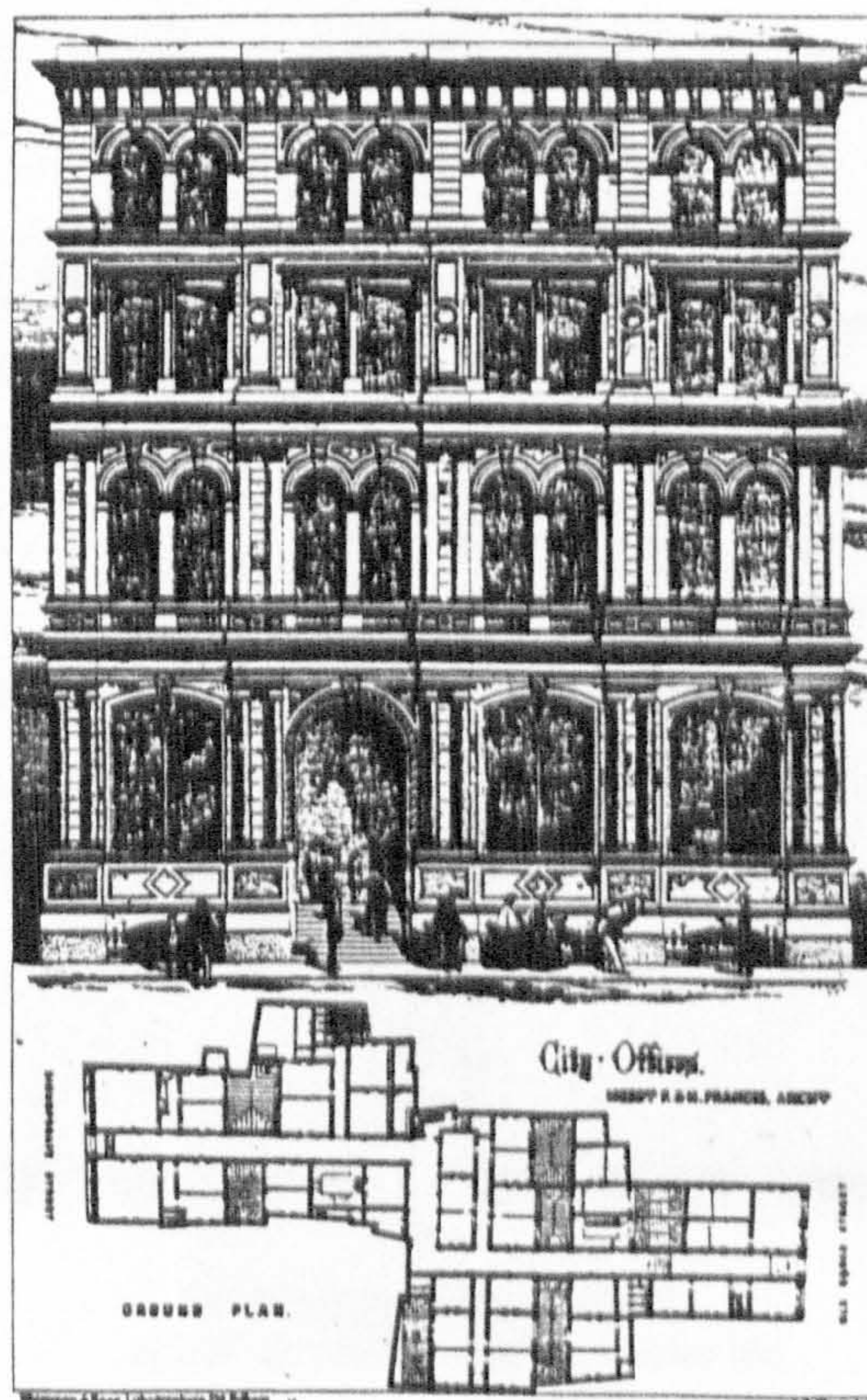
Areas Shown shaded

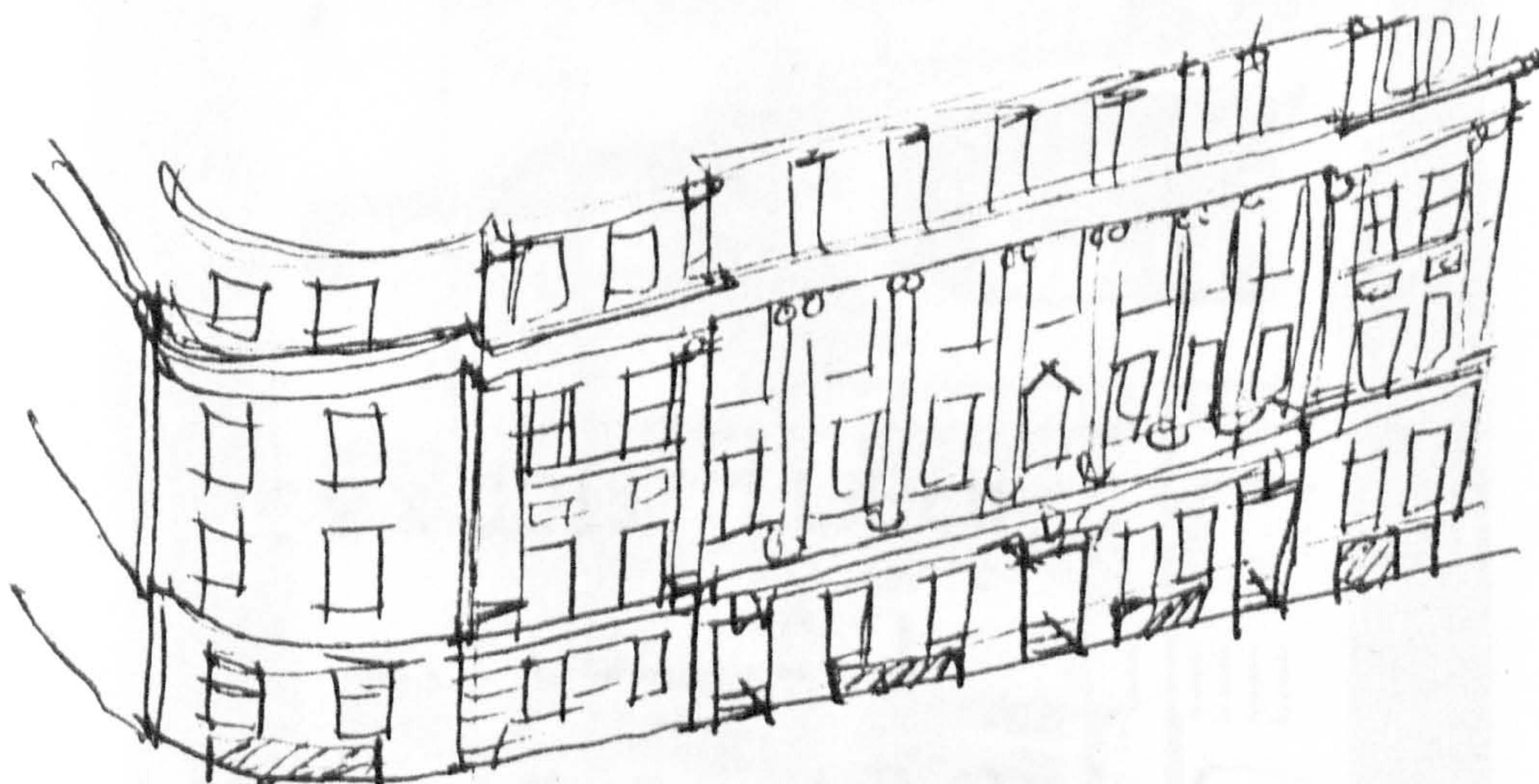
2-59

GRESHAM HOUSE, City, 18--

PALMERSTON BUILDINGS, City, 1867

2-60

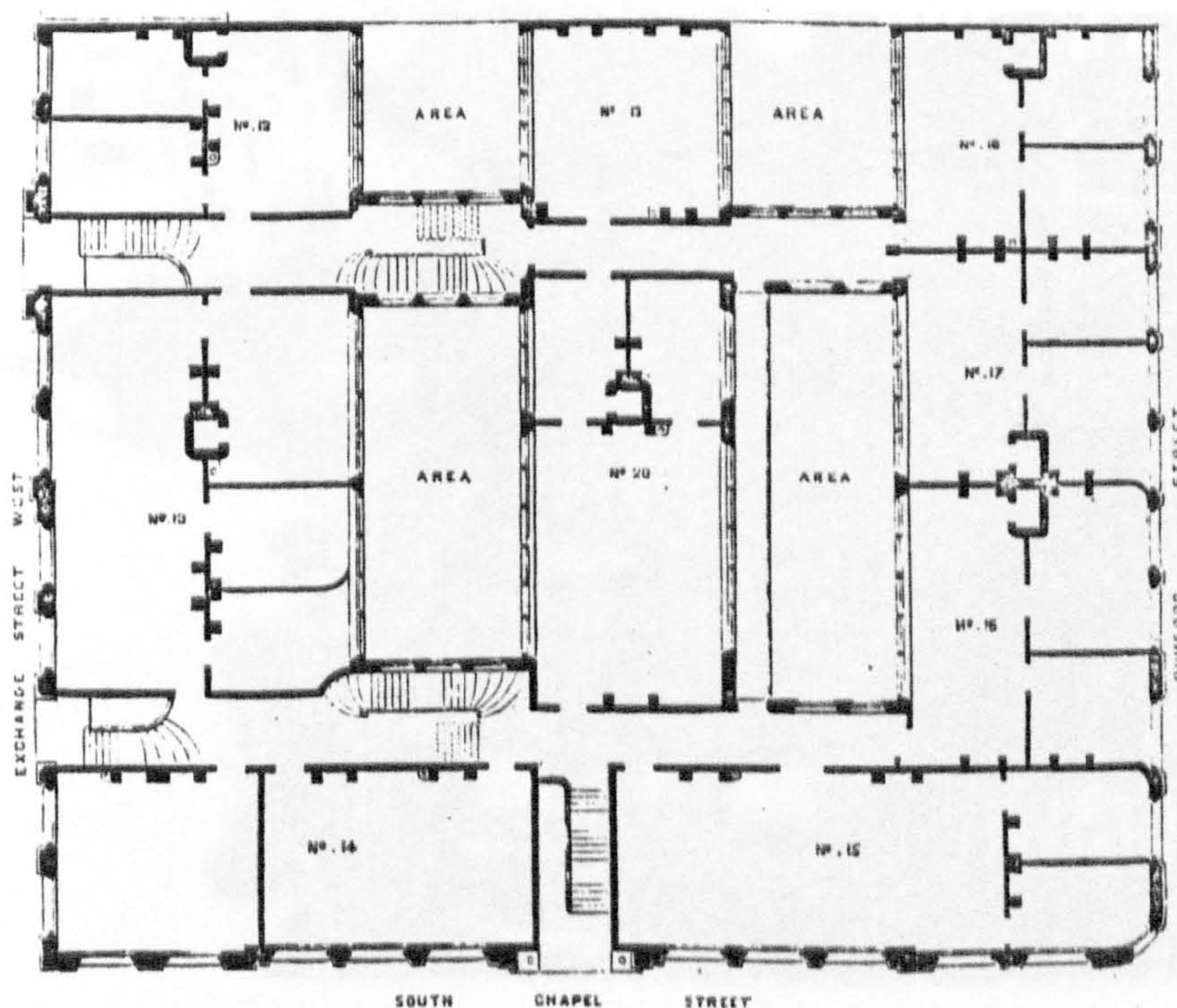




2-61

INDIA BUILDINGS, Liverpool, 1834
BROWN'S BUILDINGS, Liverpool, 1861

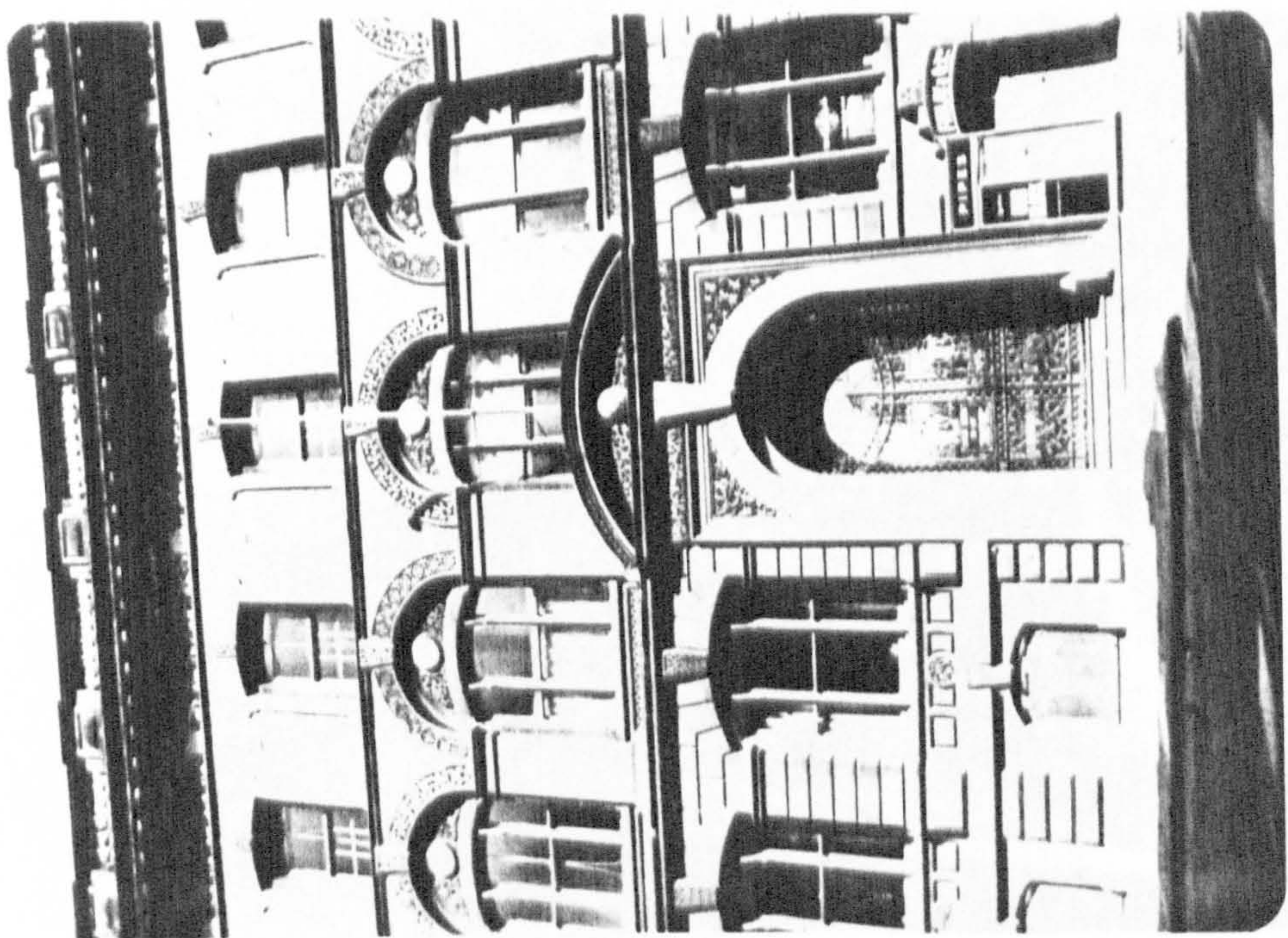
2-62



SOUTH CHAPEL STREET

SCALE OF FEET

BROWN'S BUILDINGS, LIVERPOOL.—Ground Plan.

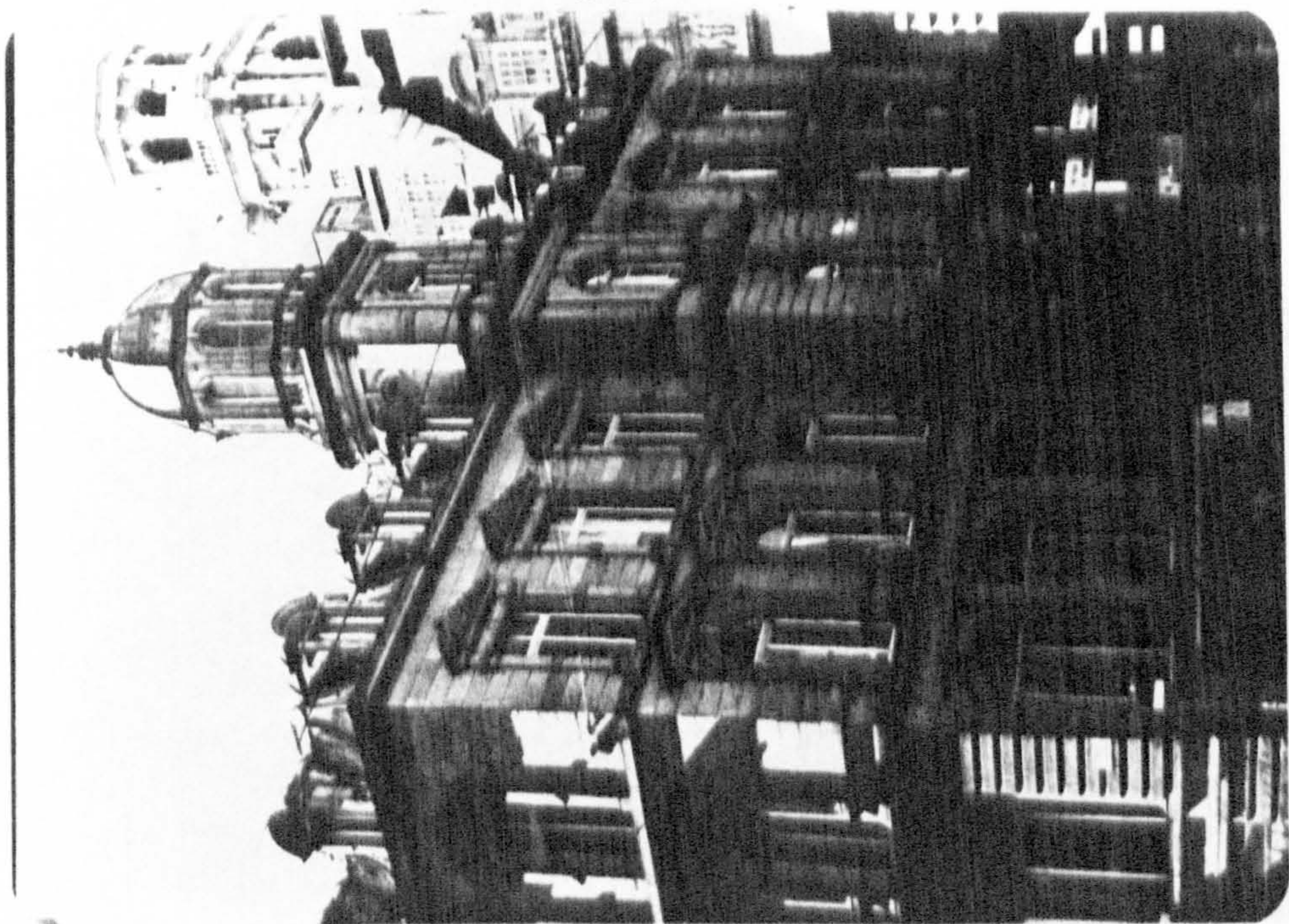


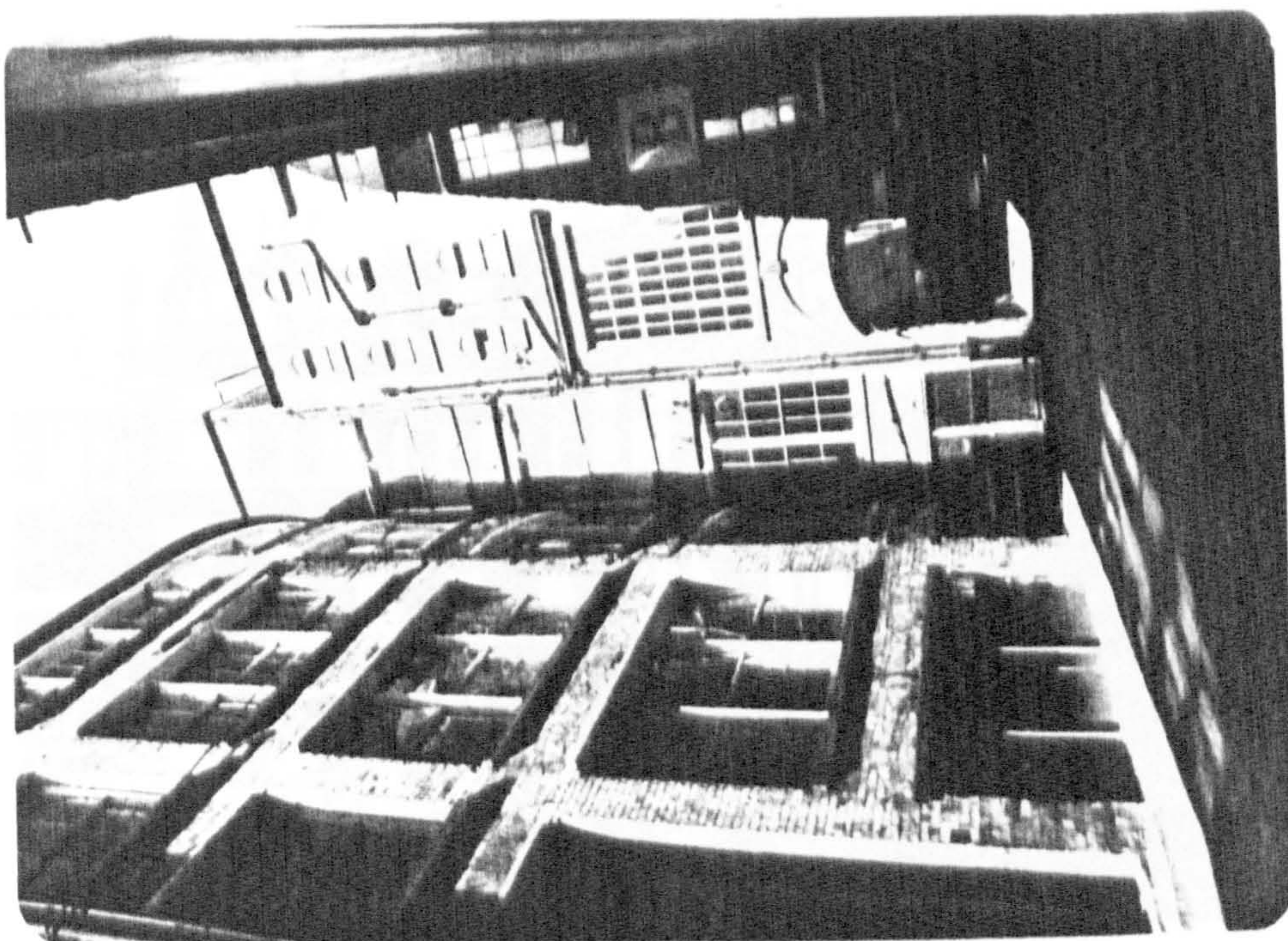
2-63

ALBANY BUILDINGS, Liverpool, 1857

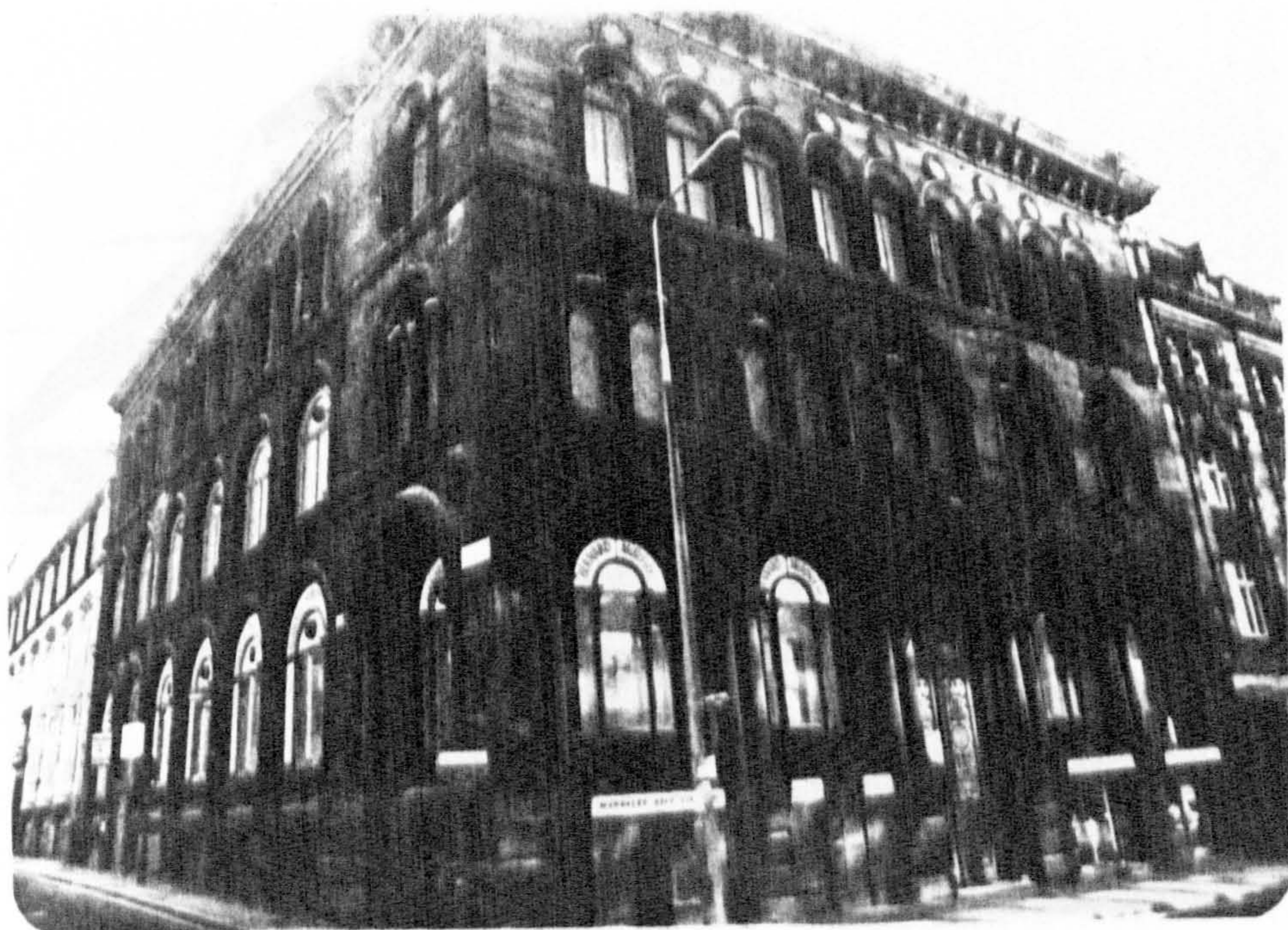
THE TEMPLE, Liverpool, 1866

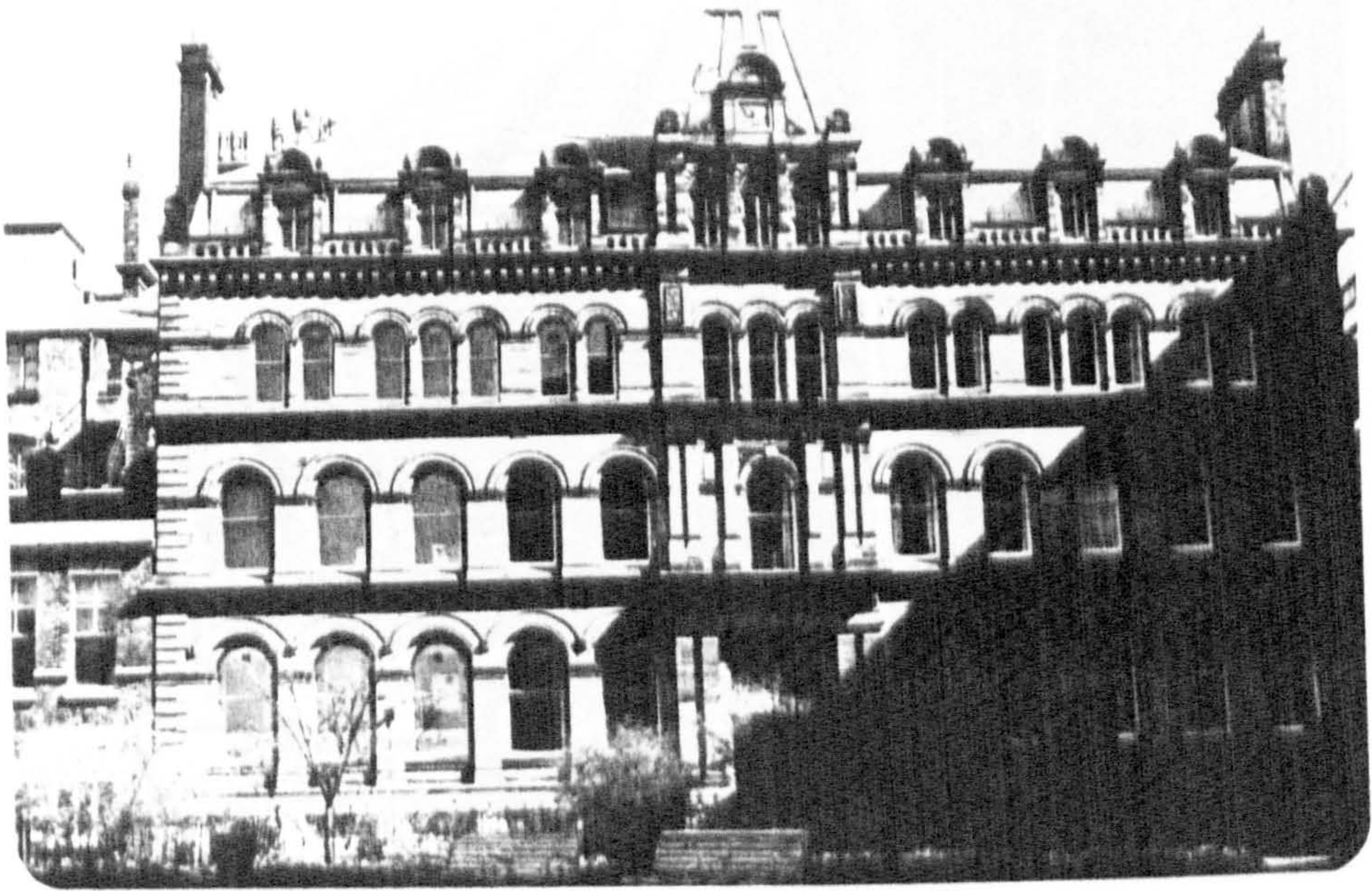
2-64



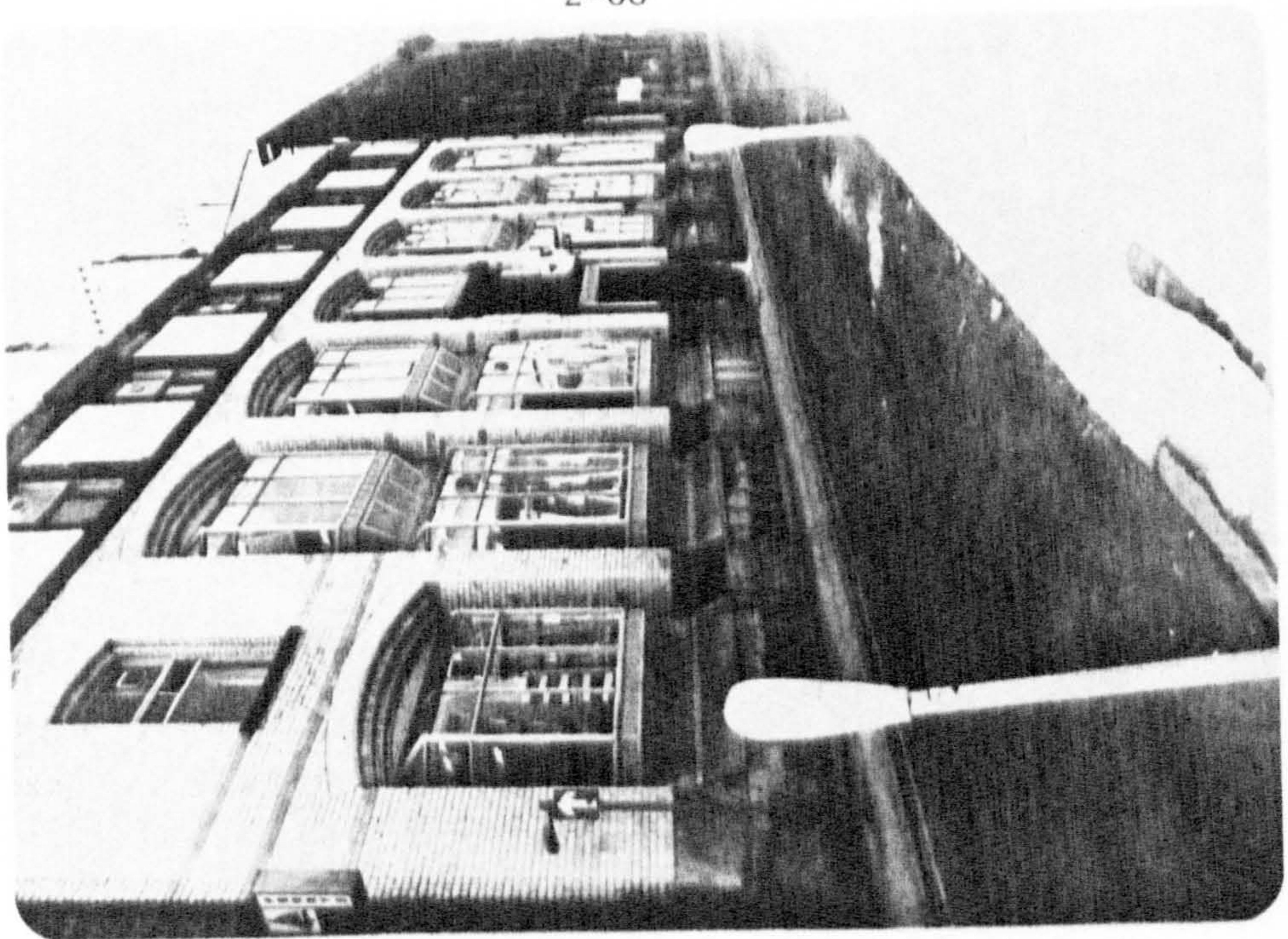


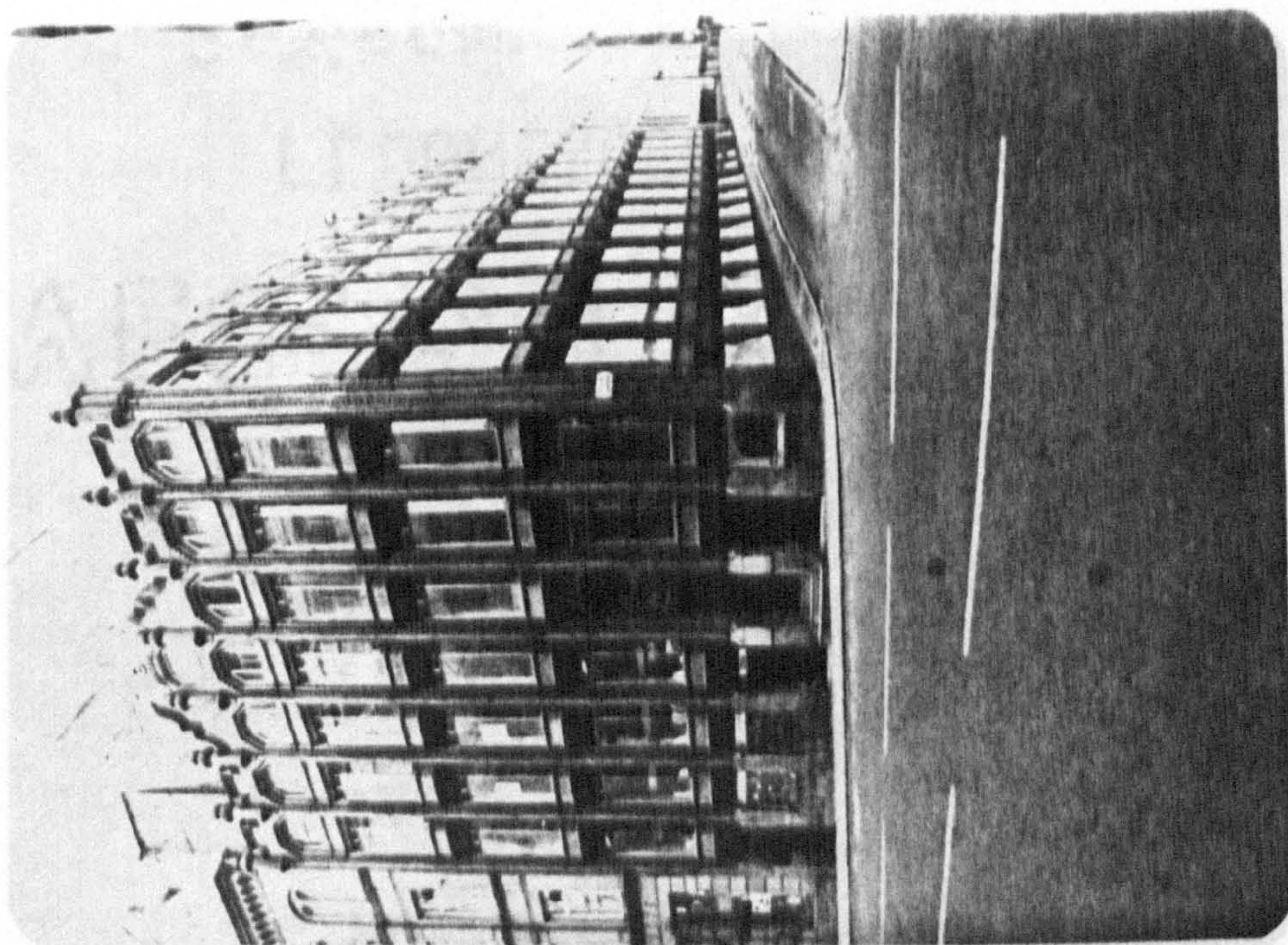
2-65
THE TEMPLE, Liverpool, 1866
HARGREAVES BUILDINGS, Liverpool, 1861
2-66





2-67
MERSEY CHAMBERS, Liverpool, 186-
MERSEY CHAMBERS, Liverpool, 186-
2-68

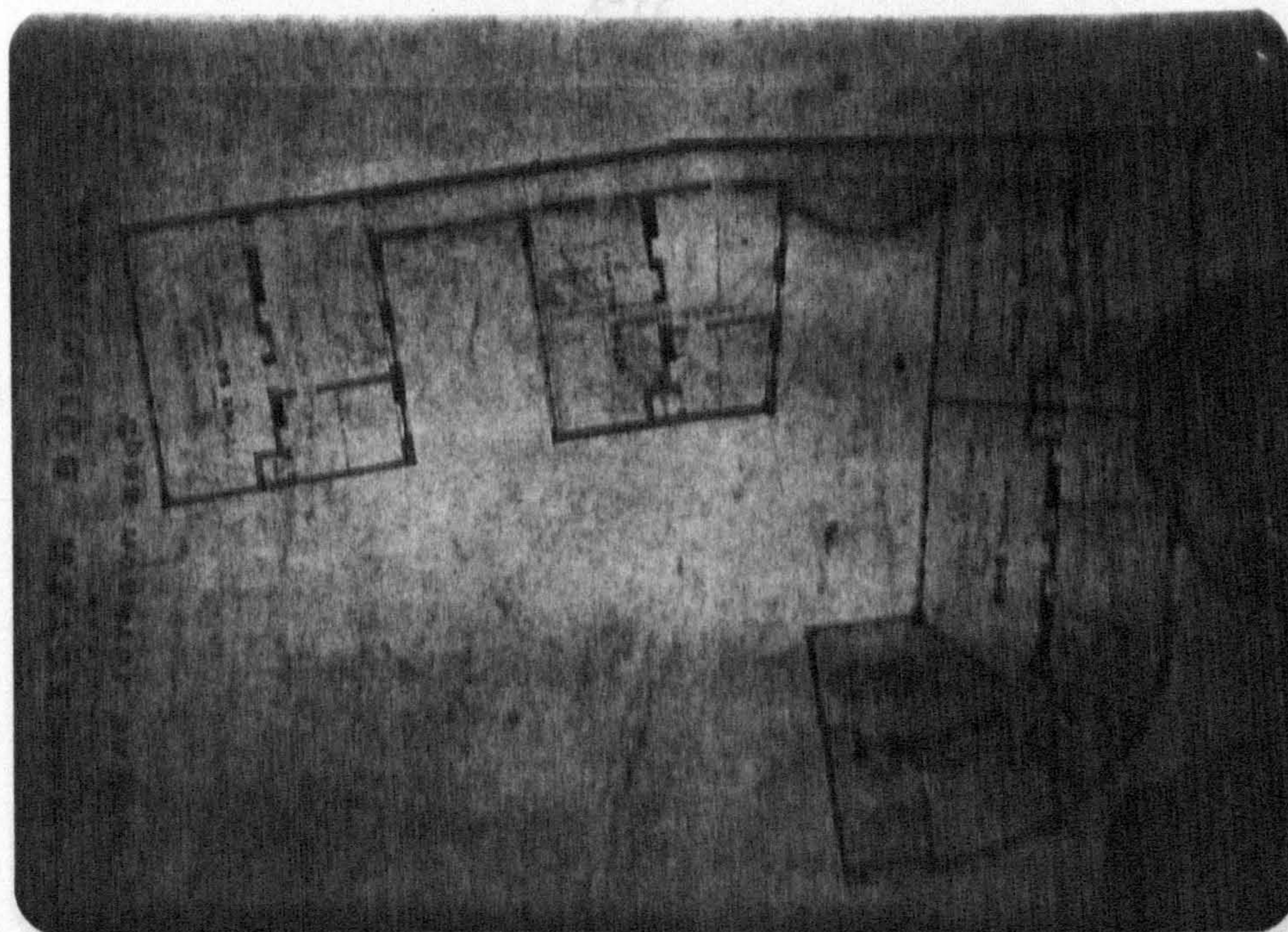


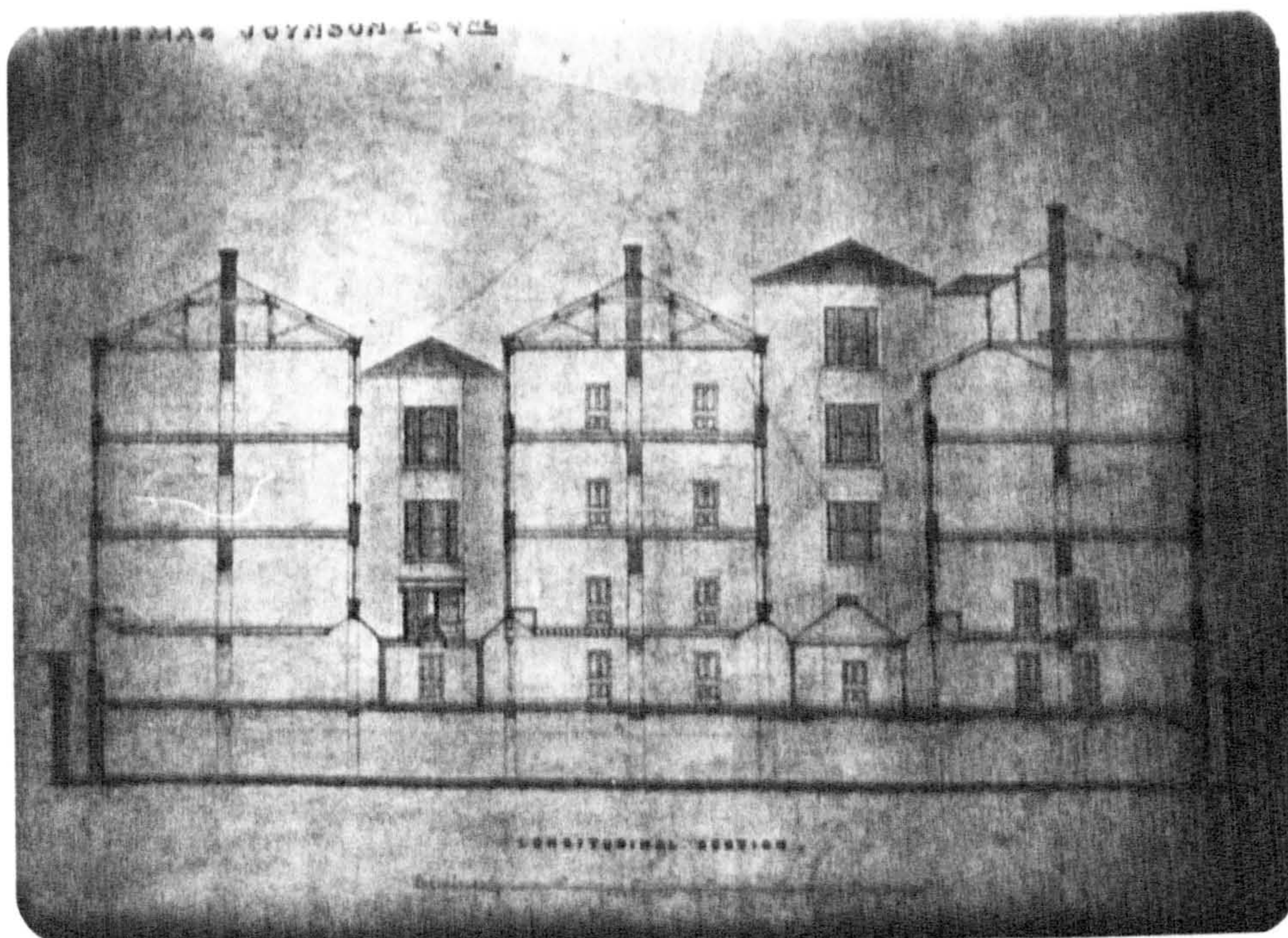


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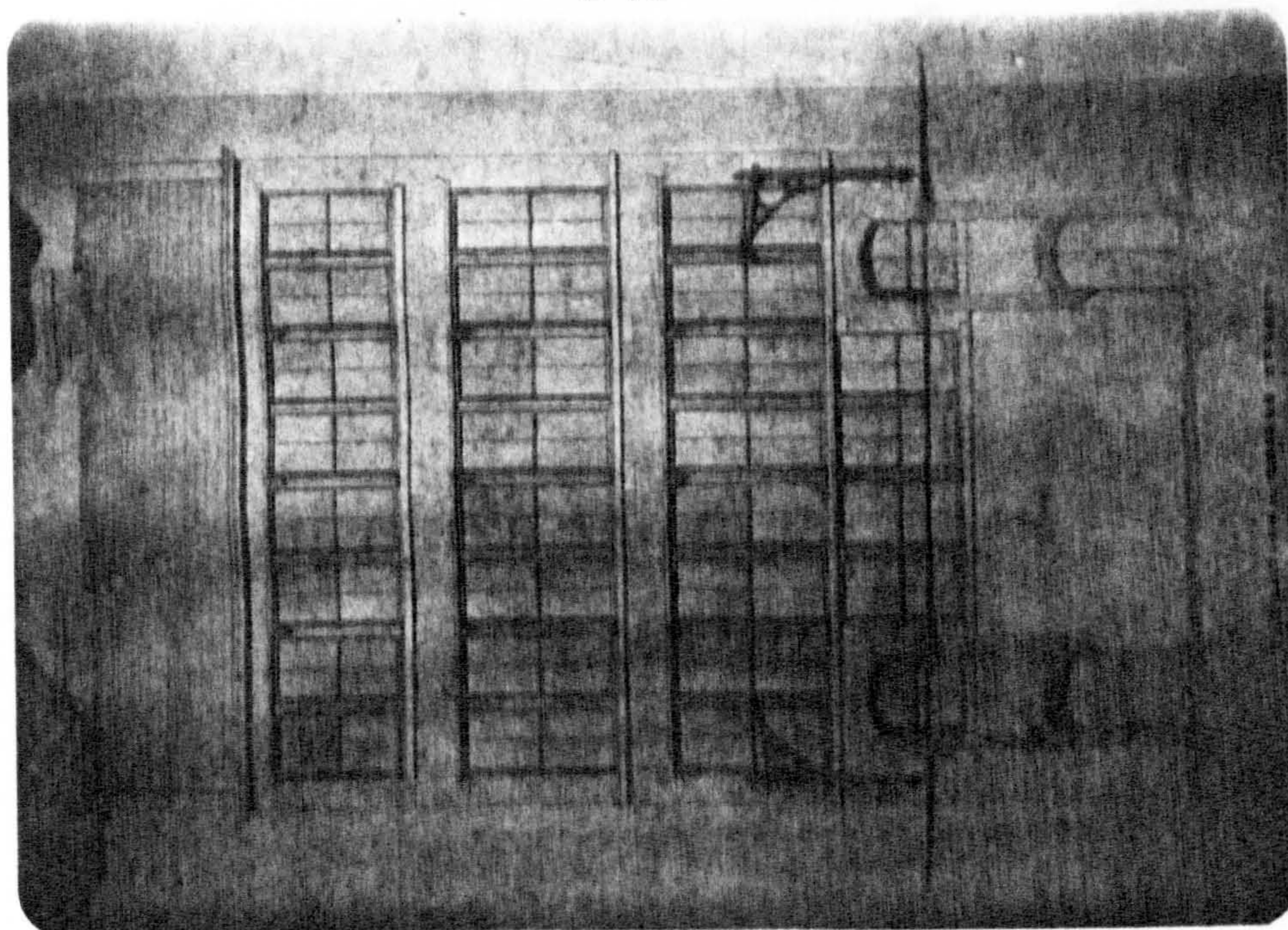
Oriel Chambers, Liverpool, 1865
Manchester Buildings, Liverpool, 1856

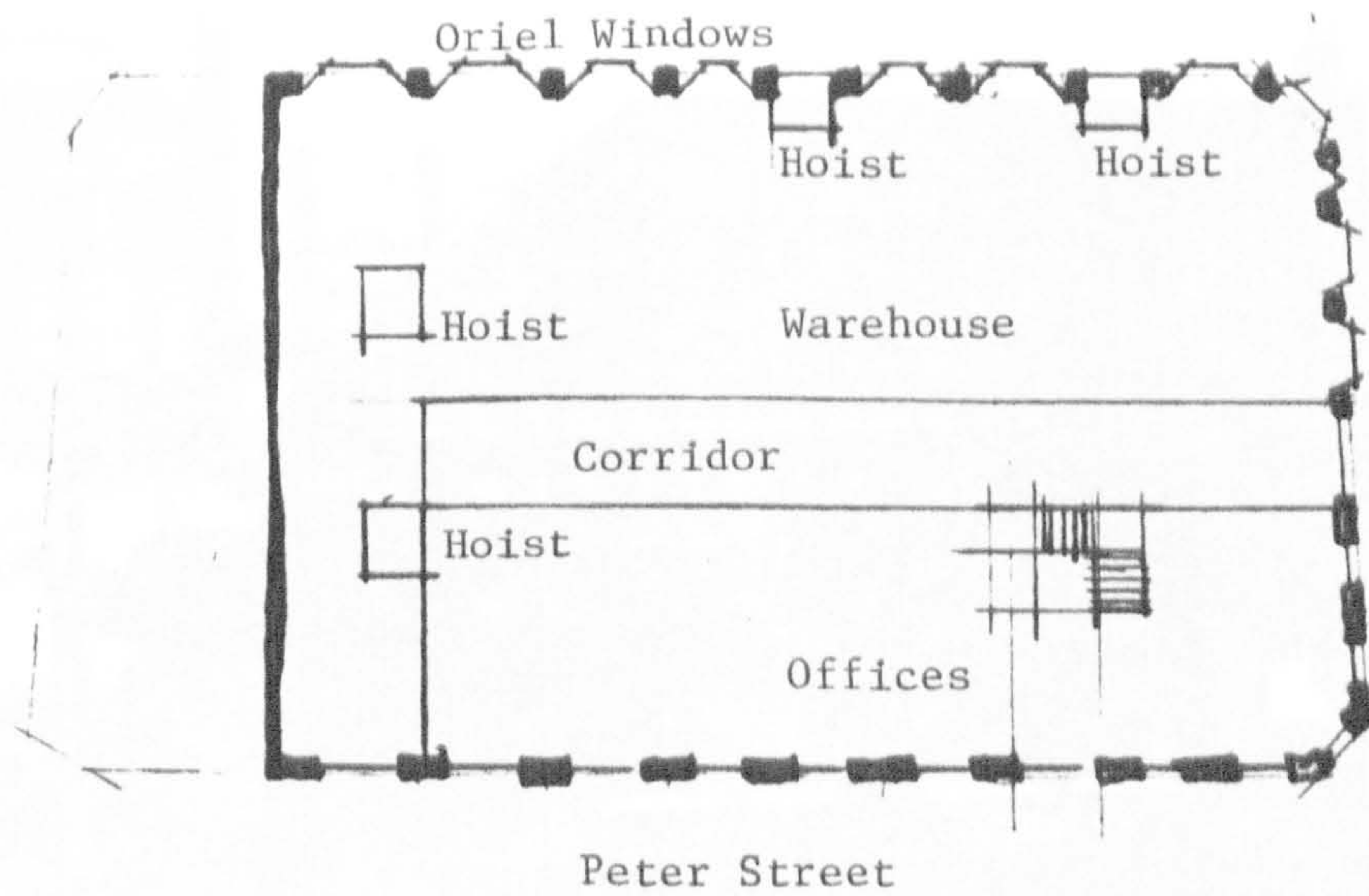
2-70





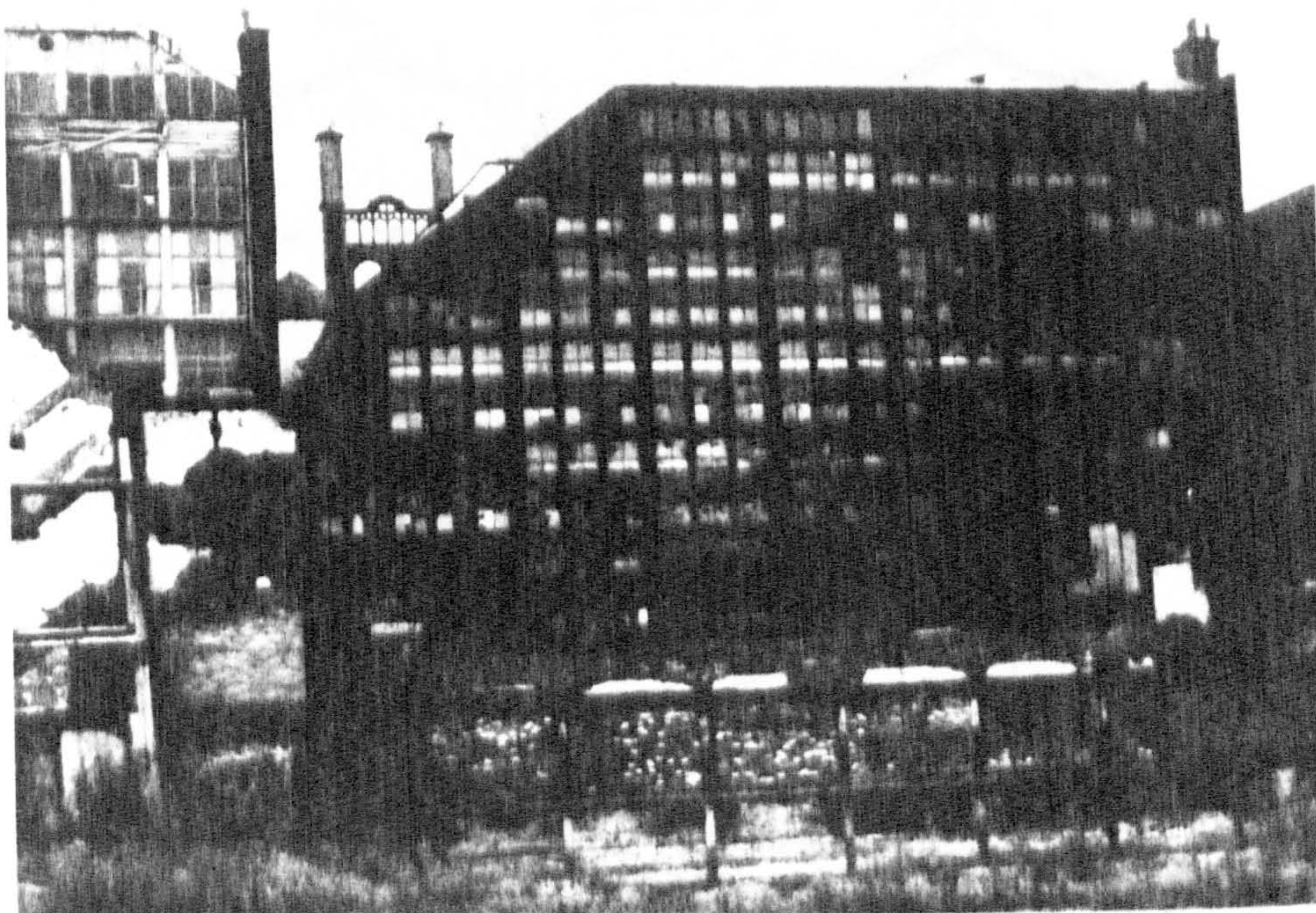
2-71
 MANCHESTER BUILDINGS, Liverpool, 1856
 MANCHESTER BUILDINGS, Liverpool, 1856
 2-72





2-73
 11 PETER STREET, Manchester, n.d.
 PRINCES BUILDINGS, Manchester, 1904
 2-74

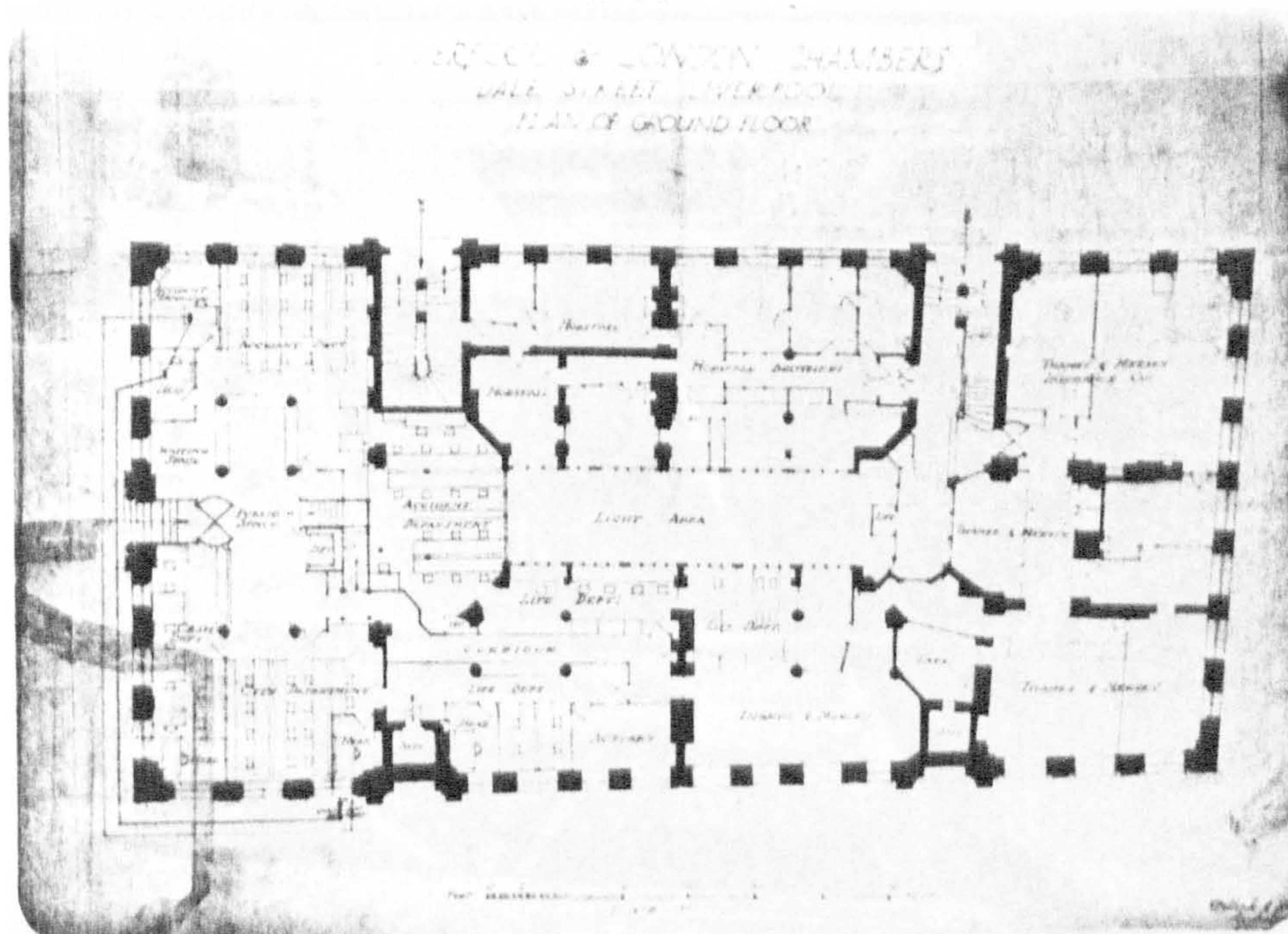


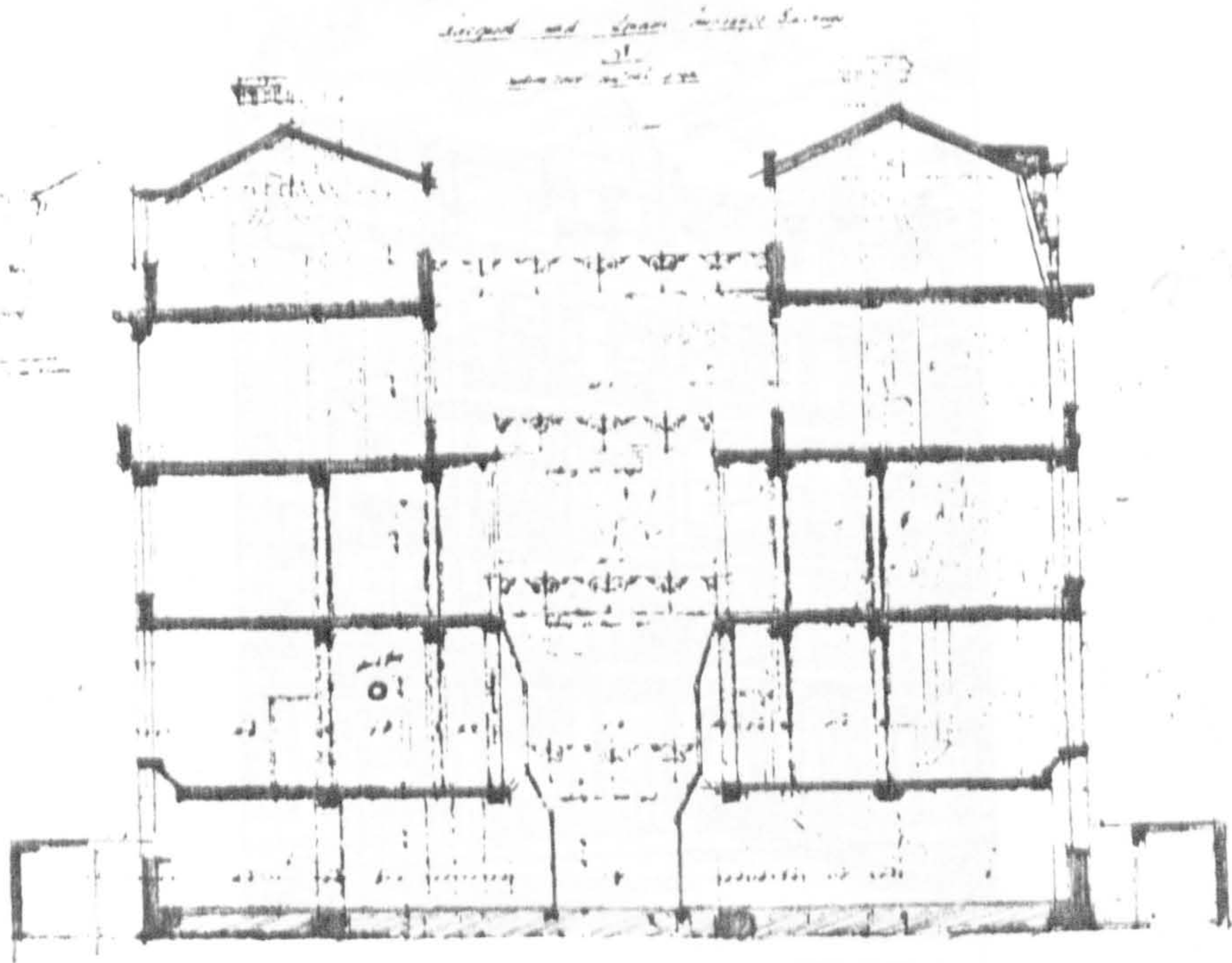


2-75

PRINCES BUILDINGS, Manchester, 1905
LIVERPOOL AND LONDON INSURANCE CO., Liverpool 1857

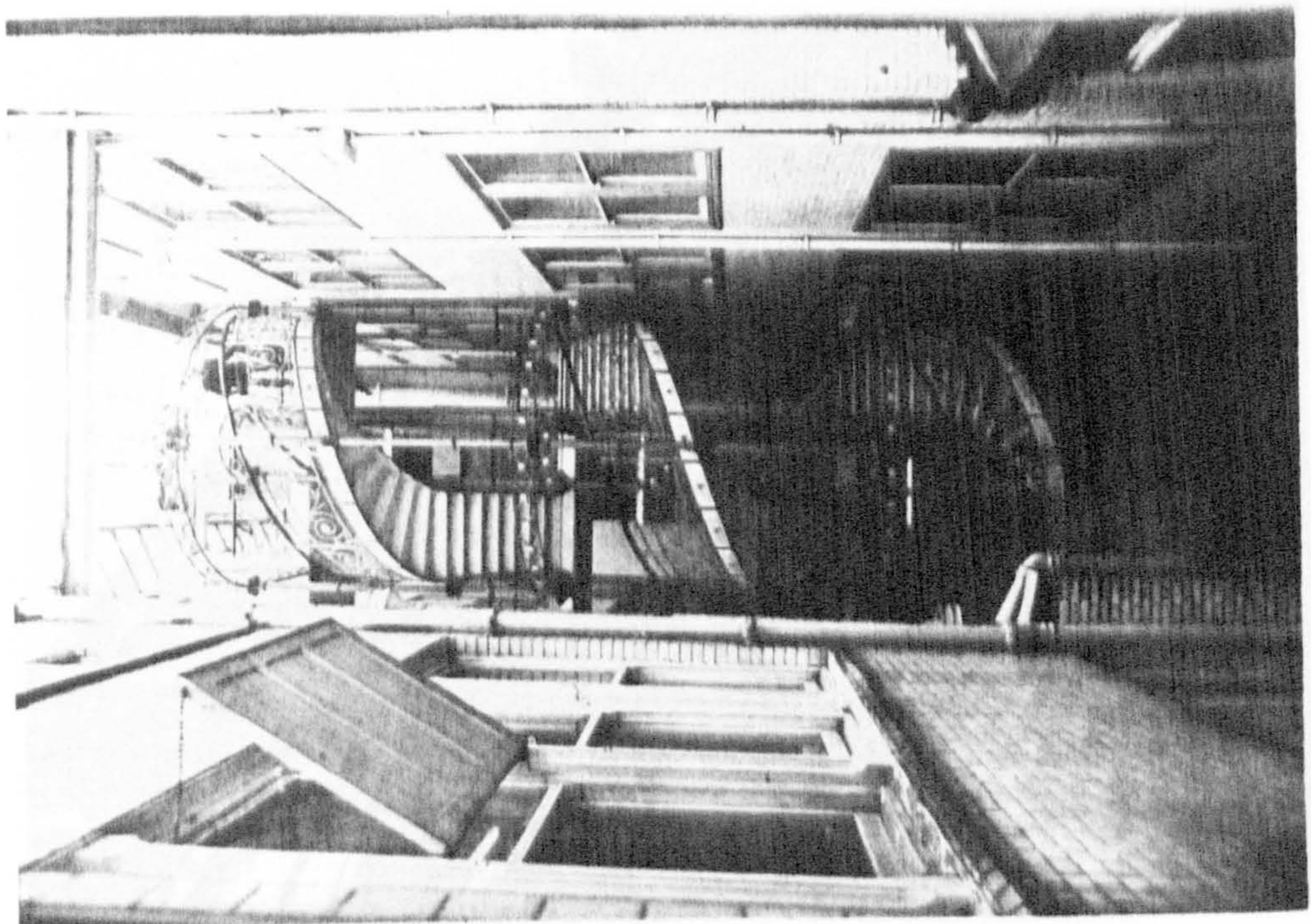
2-76





2-77

LIVERPOOL AND LONDON INSURANCE CO., Liverpool 1857
 14 CASTLE STREET, Liverpool, 18--
 2-78





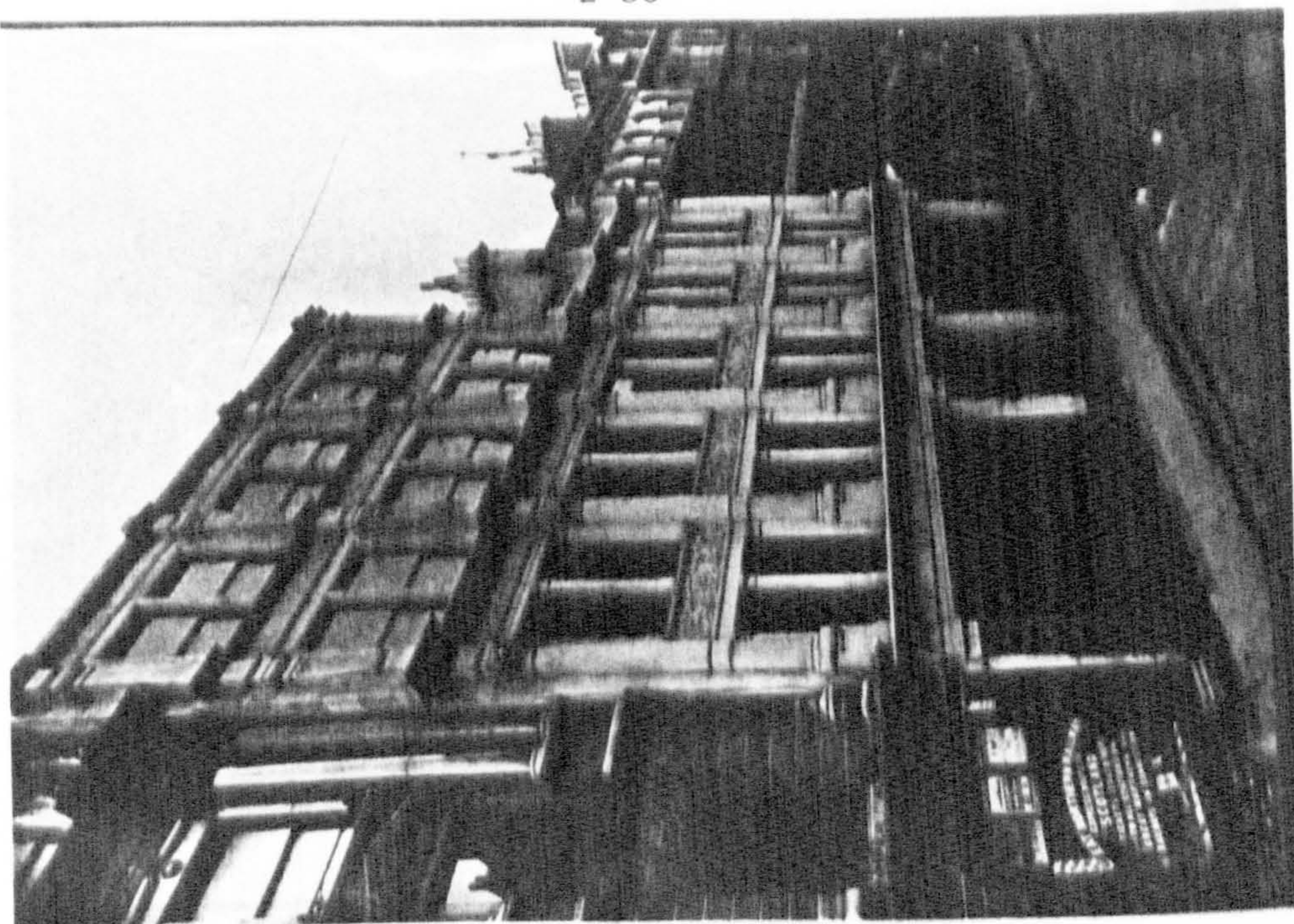
WEST INDIA HOUSE, LEADENHALL STREET, E.C.—MR. DUNN JAMES, F.R.I.B.A., ARCHT.

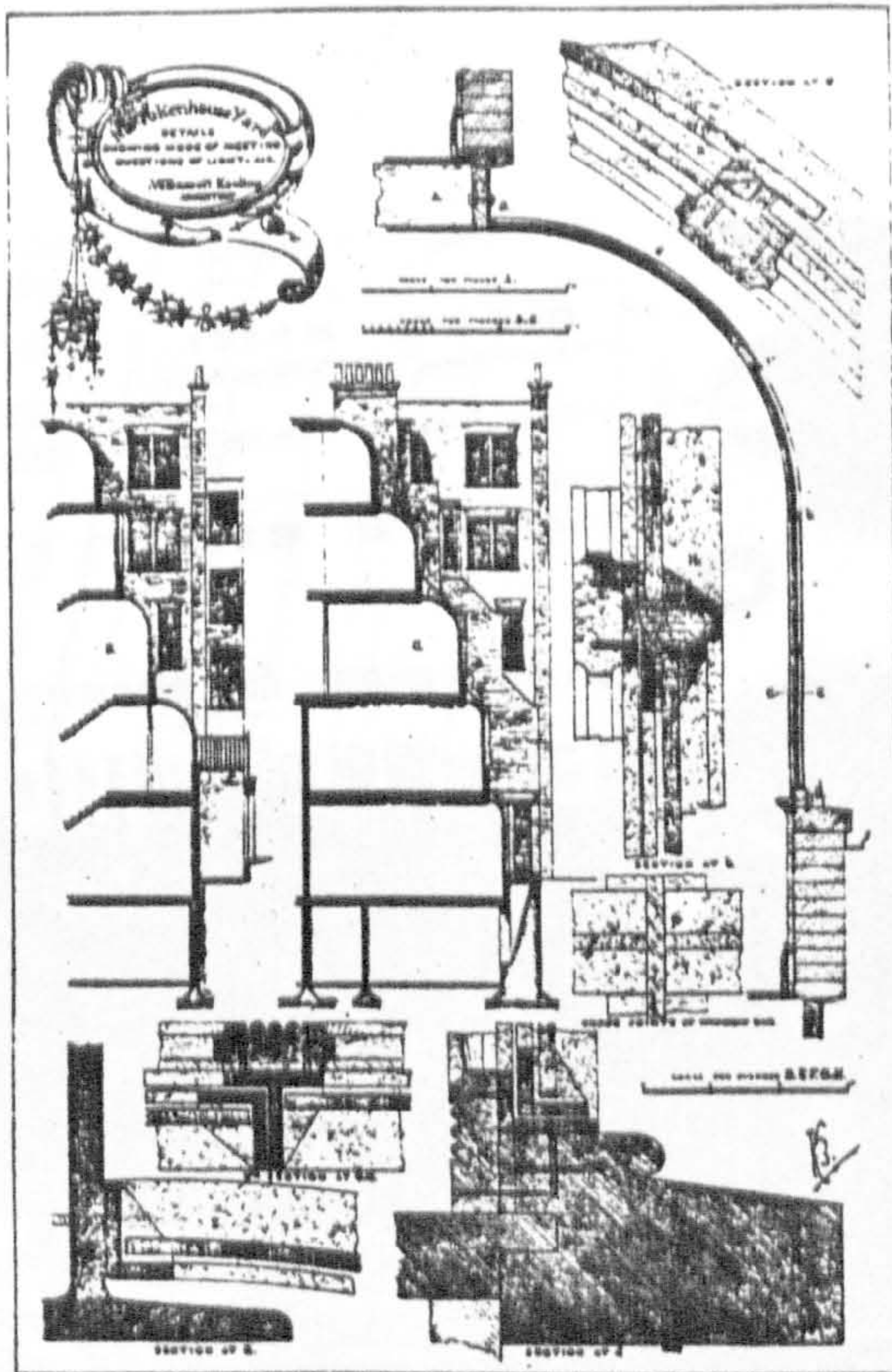
2-79

WEST INDIA HOUSE, City, 1895

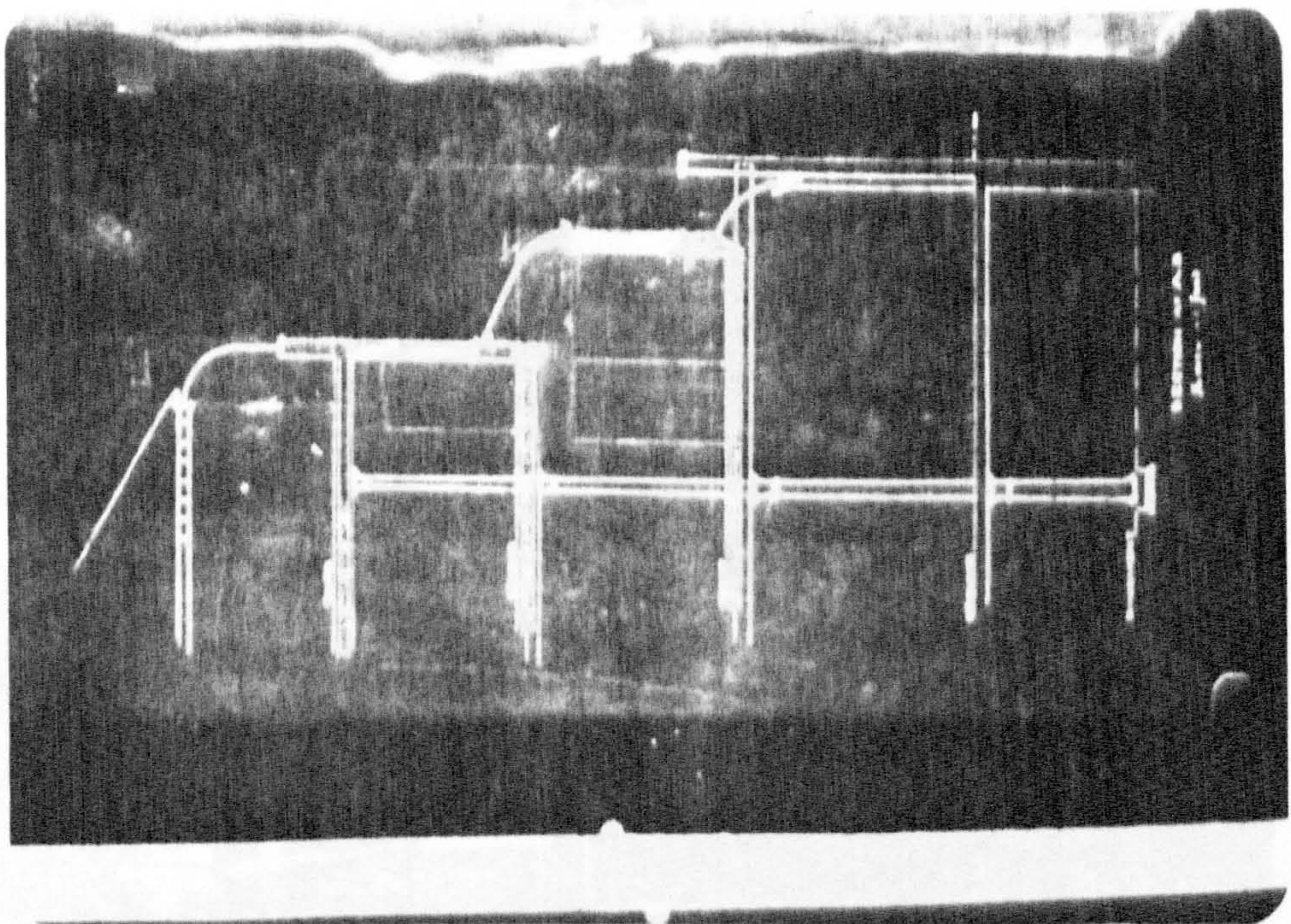
WEST INDIA HOUSE, City, 1895

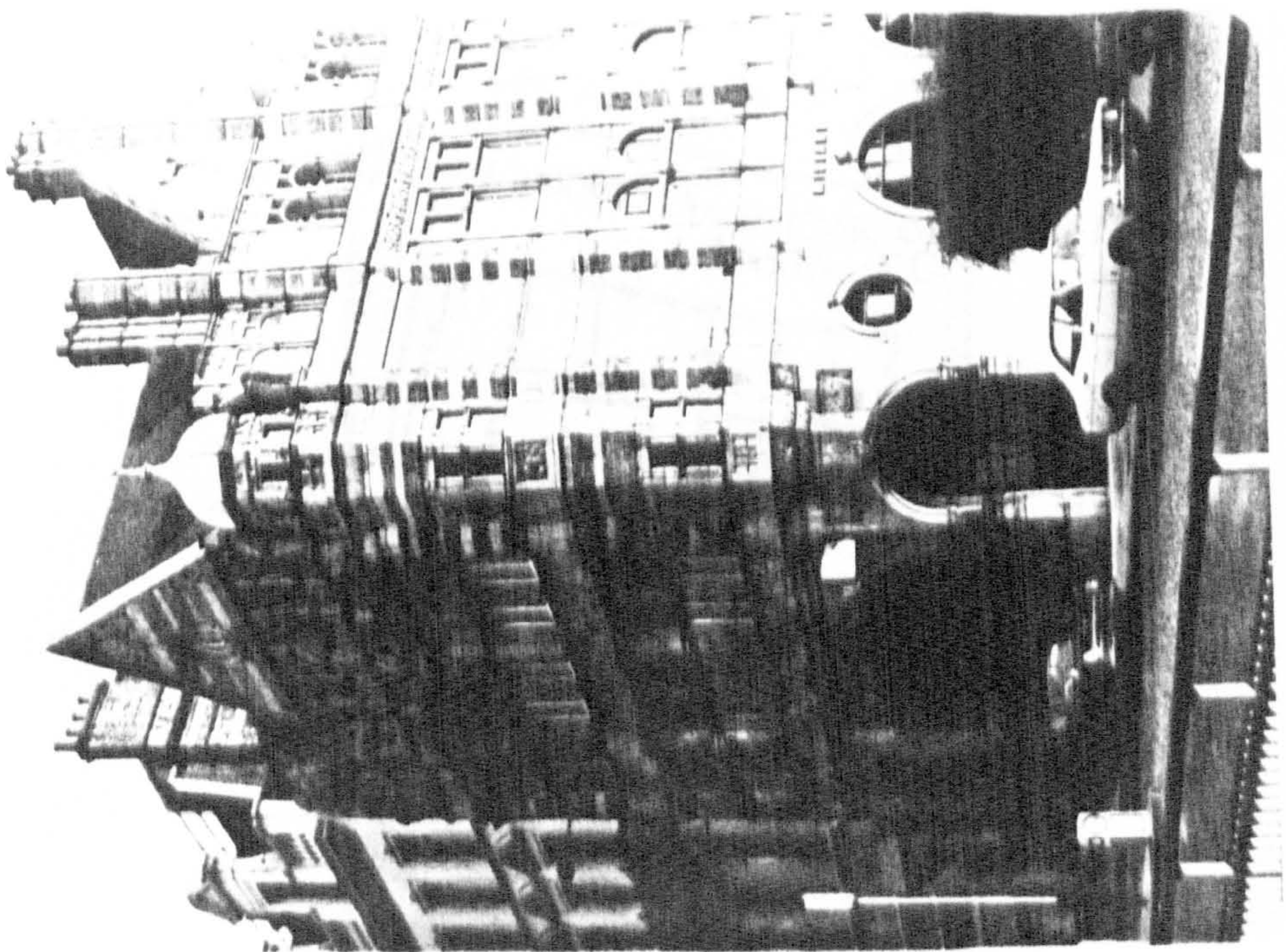
2-80





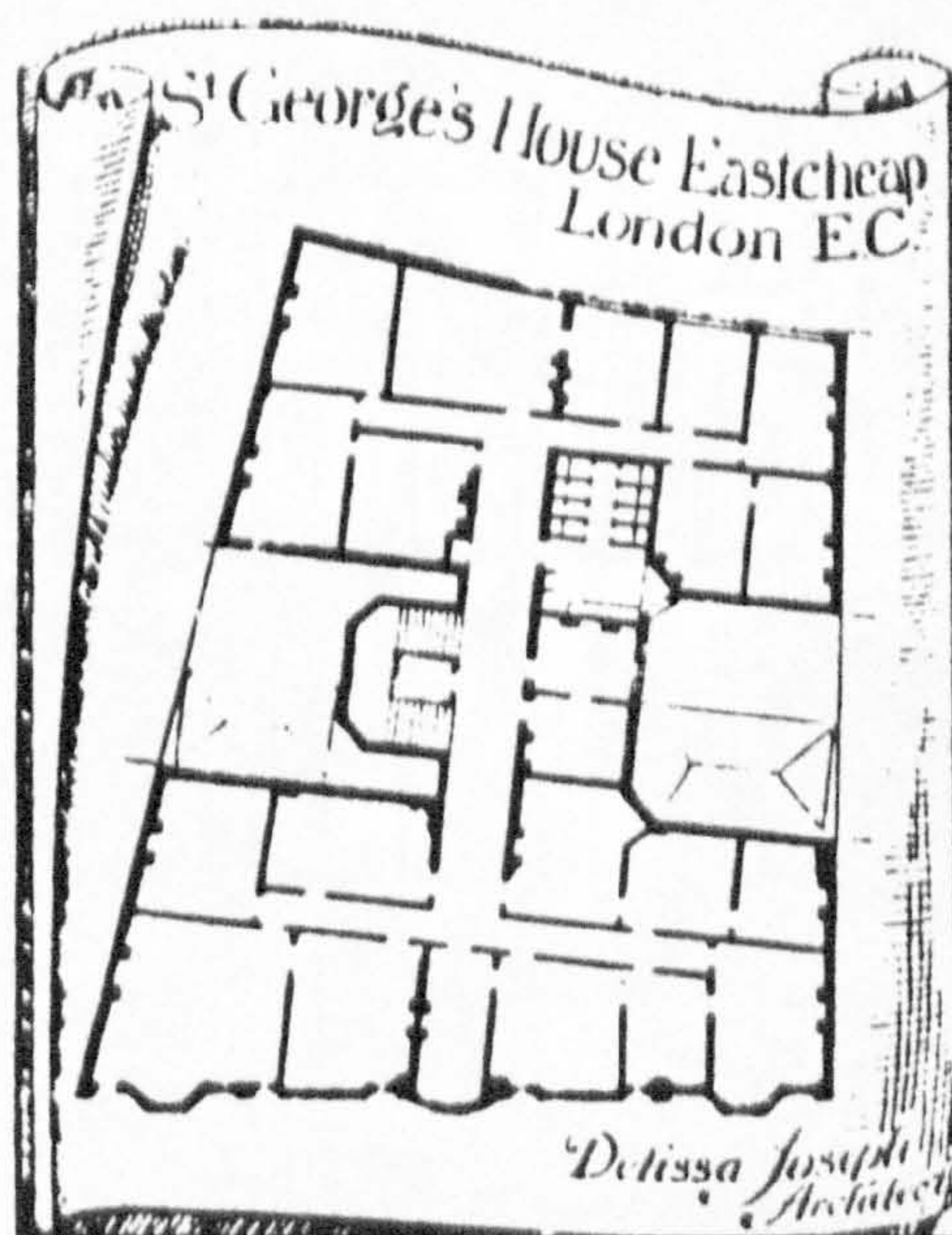
2-81
 16 TOKENHOUSE YARD, City, 1880
 3/5 ROOD LANE, City, 1899
 2-82





2-83
 CITY BANK, City, 1890
 CITY BANK, City, 1890
 2-84

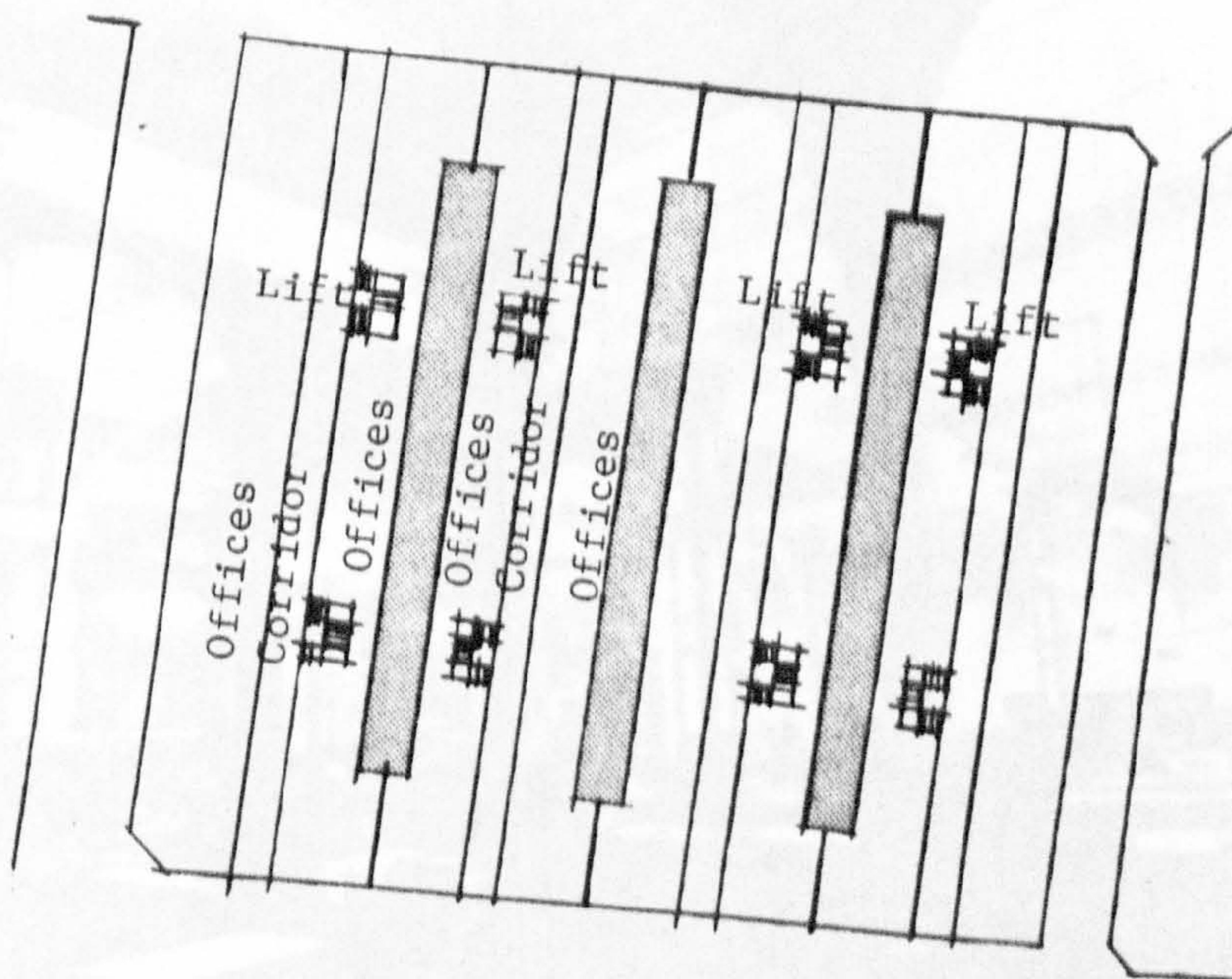




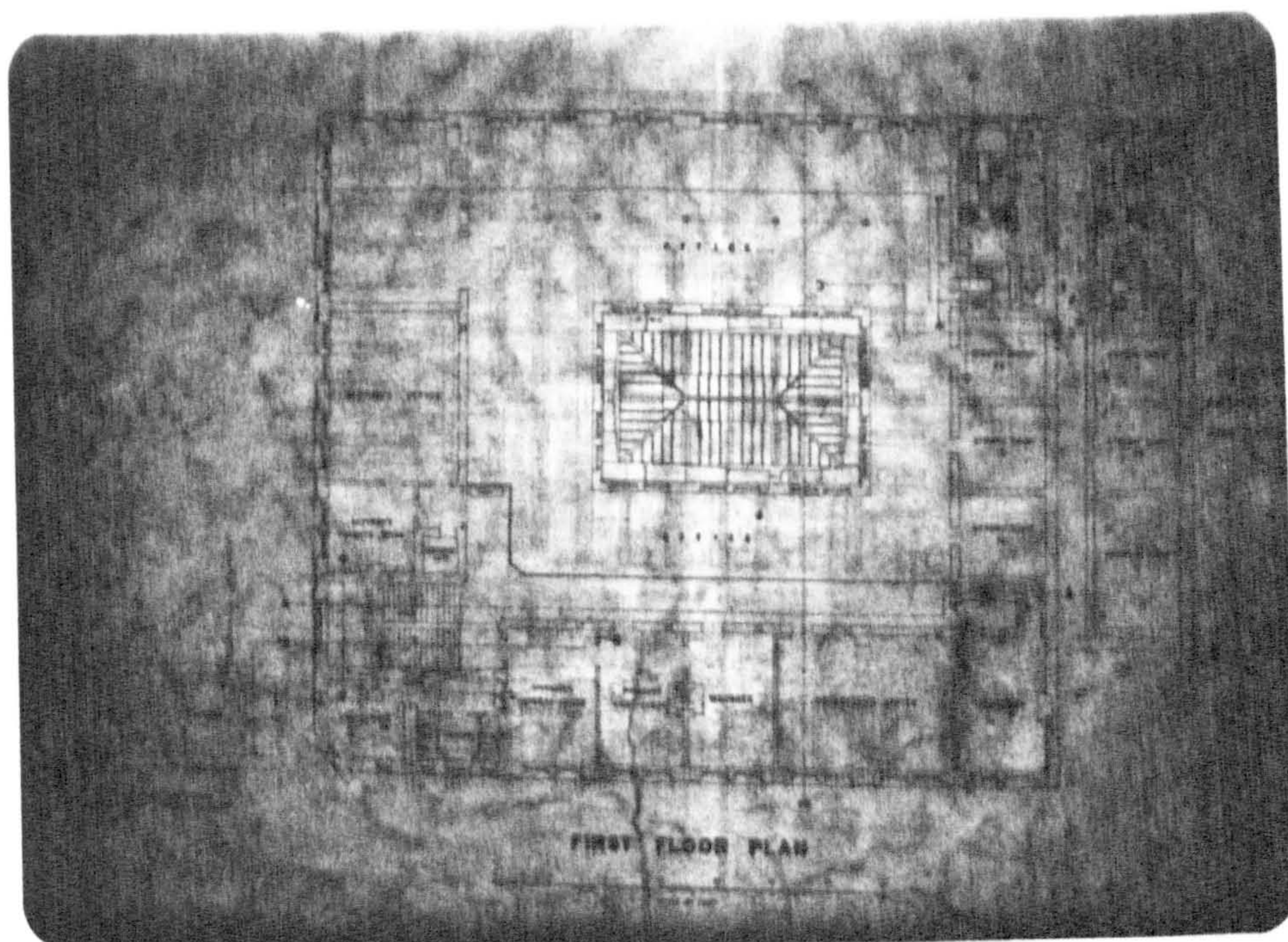
2-85

ST. GEORGE'S HOUSE, City, 1888
GREAT WINCHESTER STREET BUILDINGS, City, n.d.

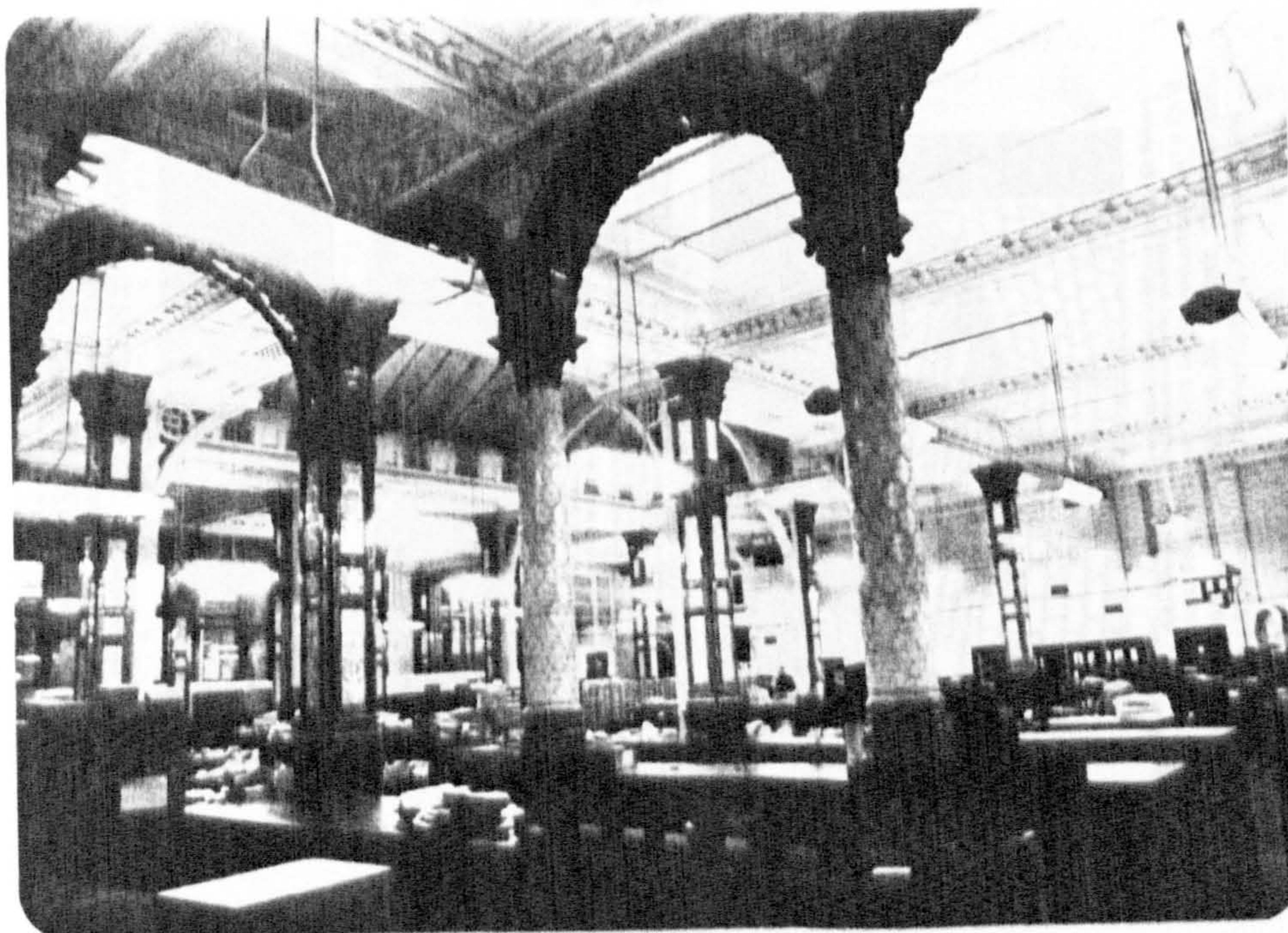
2-86



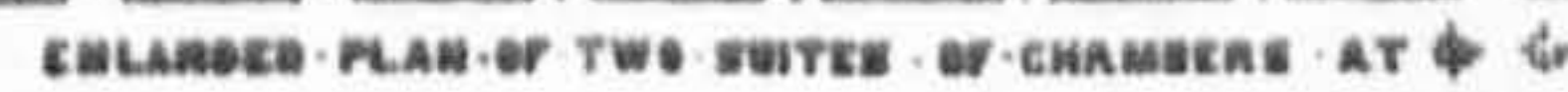
Areas shown shaded



2-87
 REFUGE ASSURANCE CO., Manchester, 188-
 REFUGE ASSURANCE CO., Manchester, 188-
 2-88



· PLAN OF THE PRINCIPAL FLOOR ·

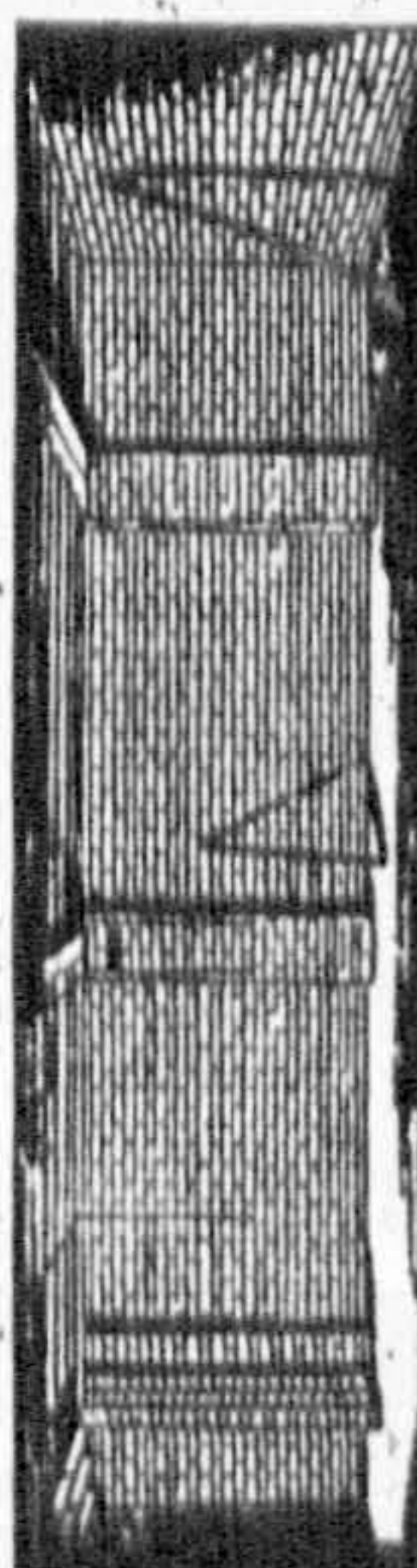
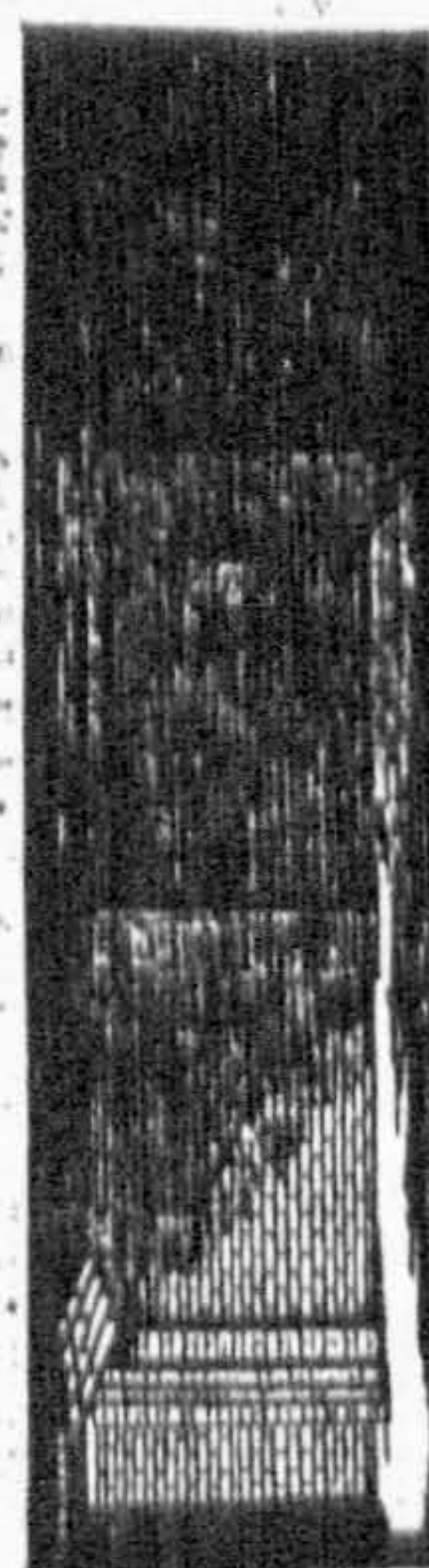
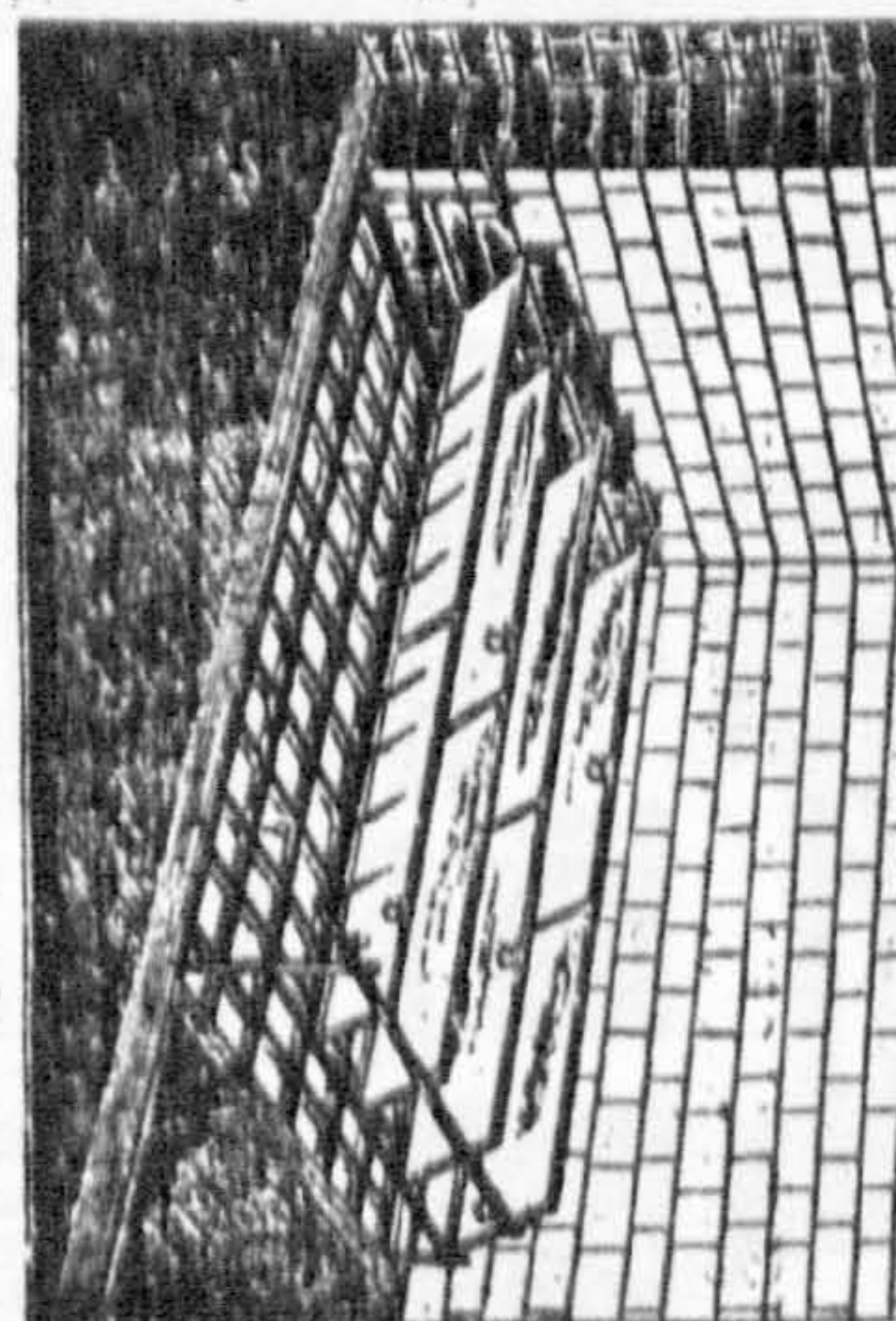


2-89

WESTMINSTER CHAMBERS, Westminster, 1863
W. BRASS REFLECTING PAVEMENT LIGHTS, 1883

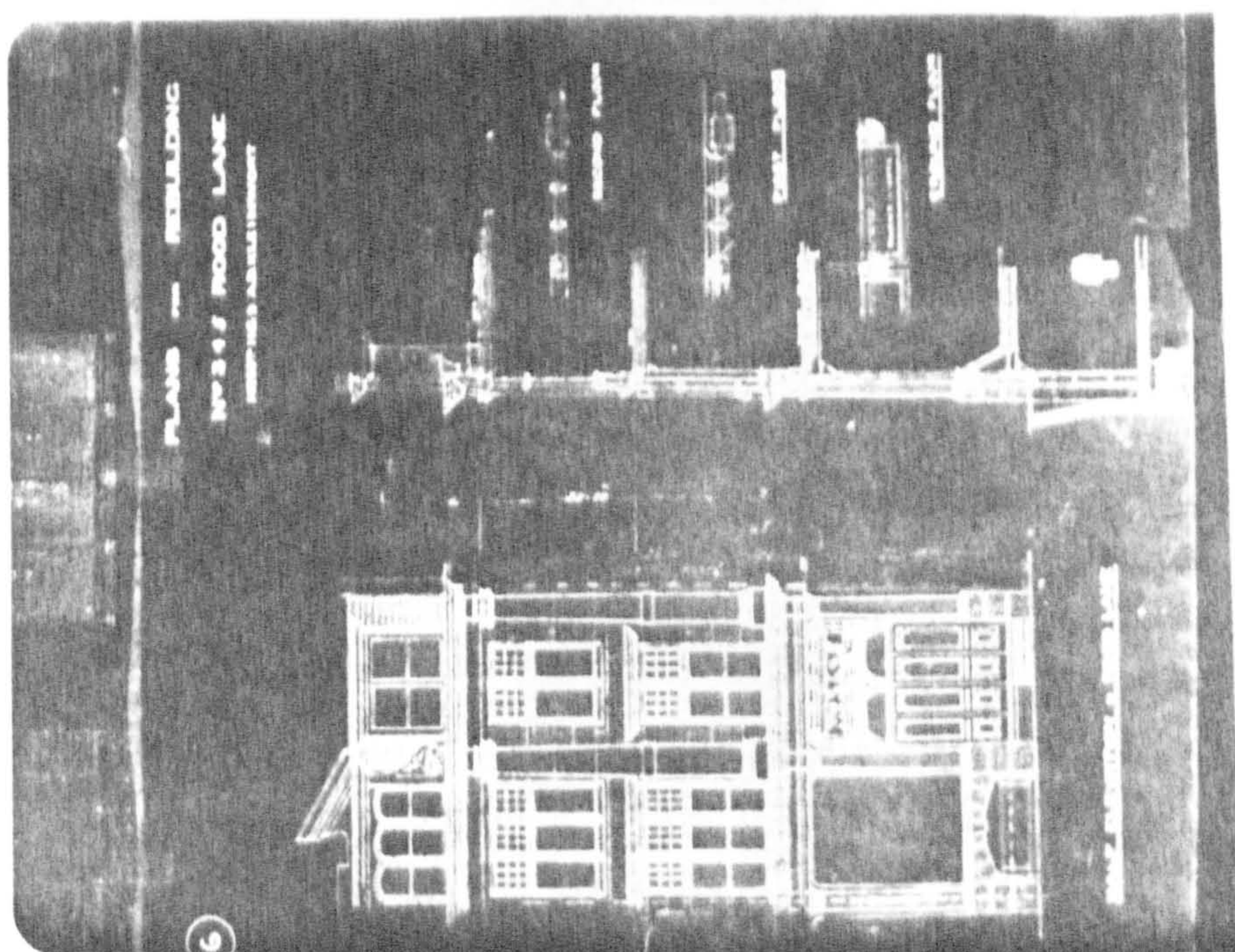
2-90

W. BRASS, Junr., 47, Old Street, St. Luke's, London, E.C.,
MANUFACTURERS OF THE IMPROVED
REFLECTING PAVEMENT LIGHTS.

[illegible]

Partnerships Three—Explanation.—(a) Several fixed volumes of different depths. (b) Steady plant growing. (c) Floating mass, and adjoining quadrants.

W. BRASS, Junr., 47, Old Street, St. Luke's, London, E.C.,
Illustrated Prospectus and Price List on Application to
Students and Manufacturers of the Improved Reflecting Pressure-Light.

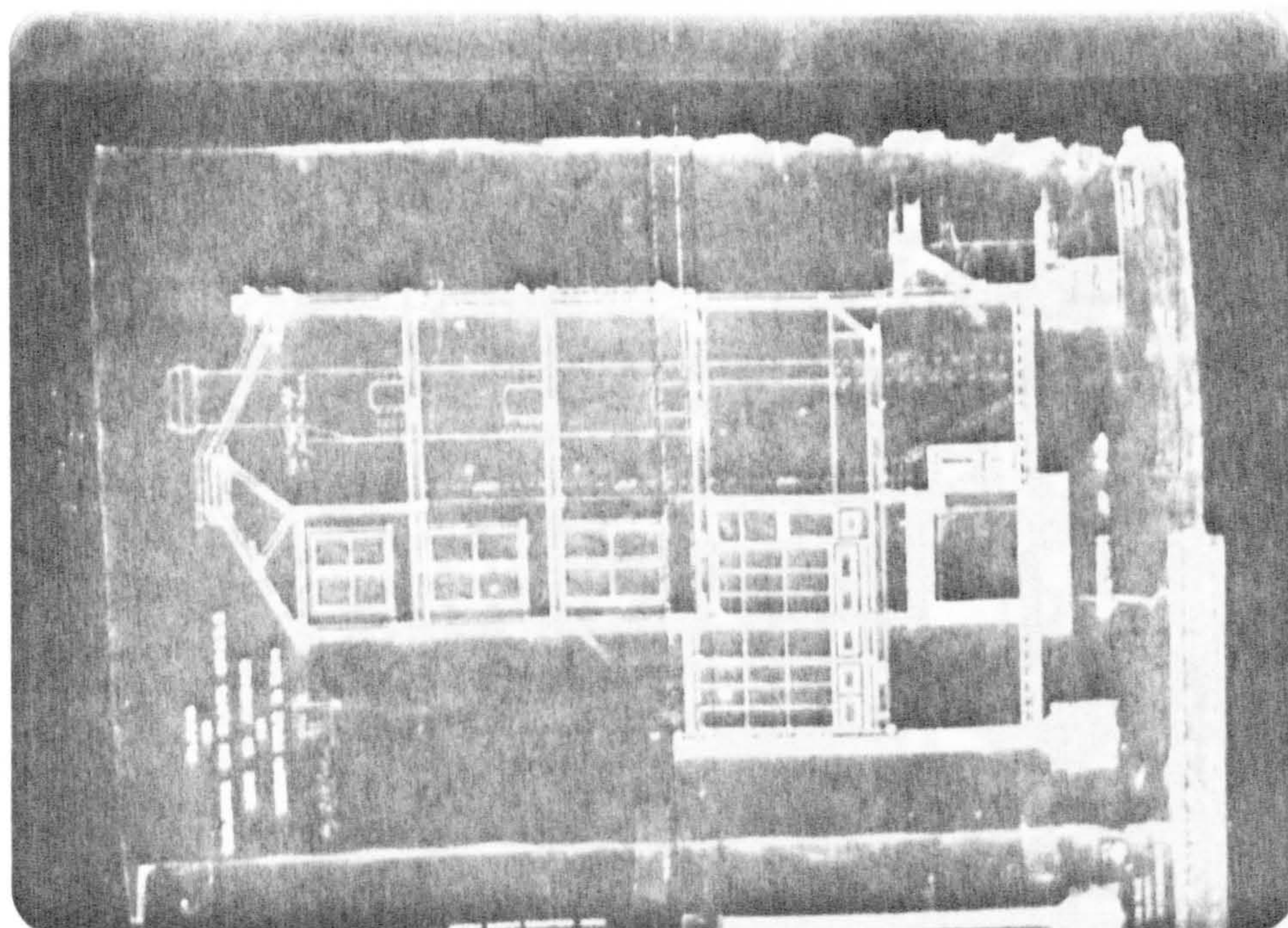


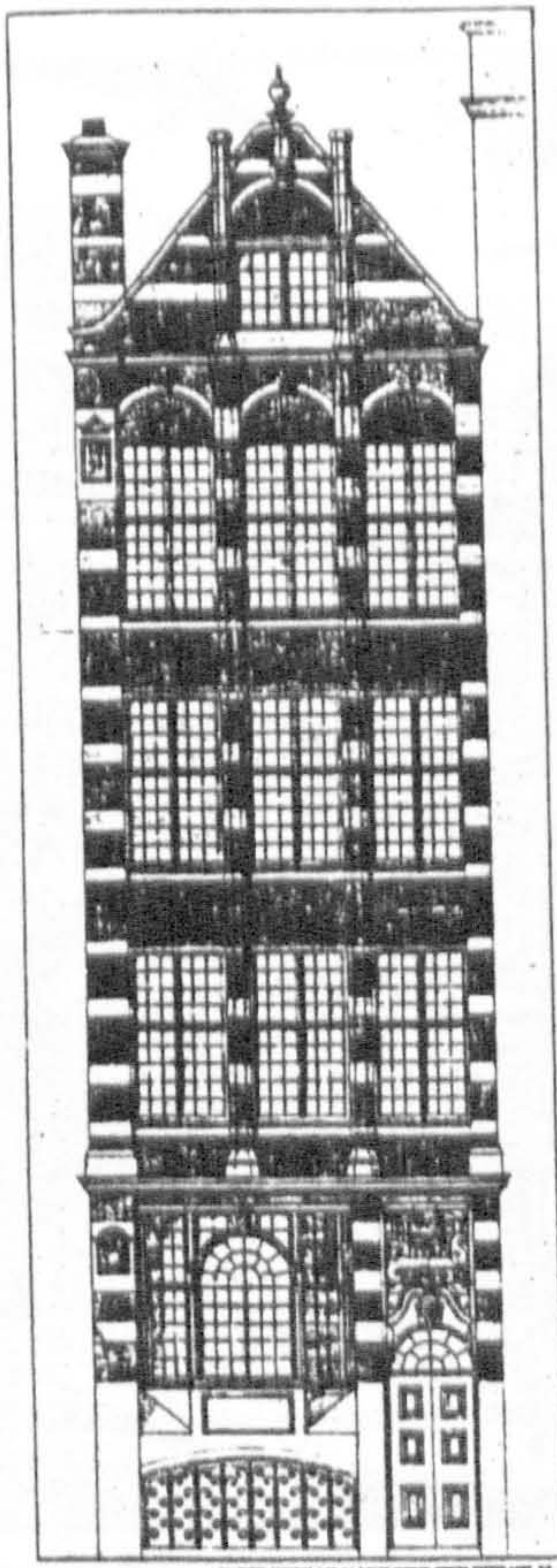
2-91

3/5 ROOD LANE, City, 1899

MESSRS. HALES AND SONS, City, ca. 1900

2-92



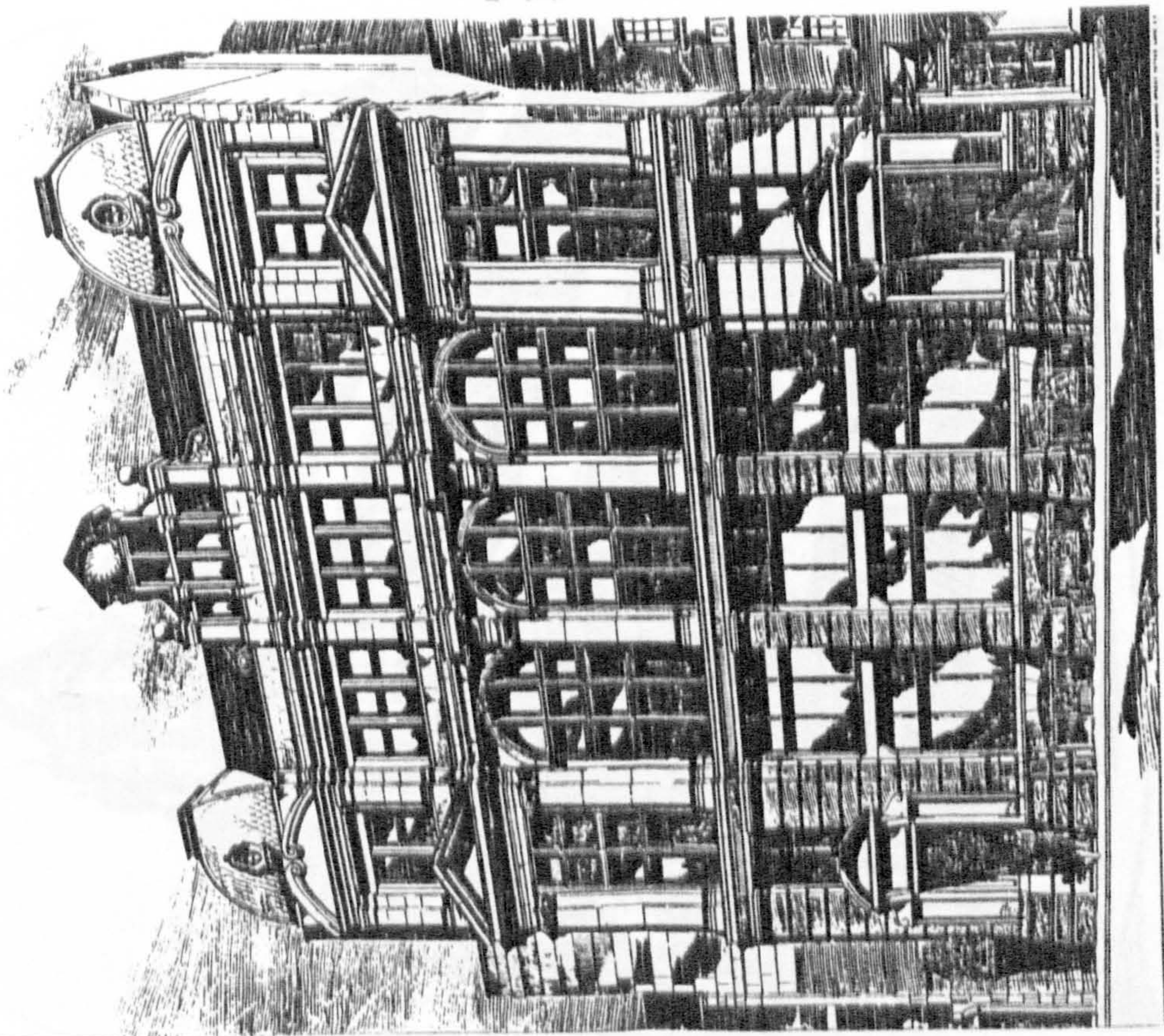


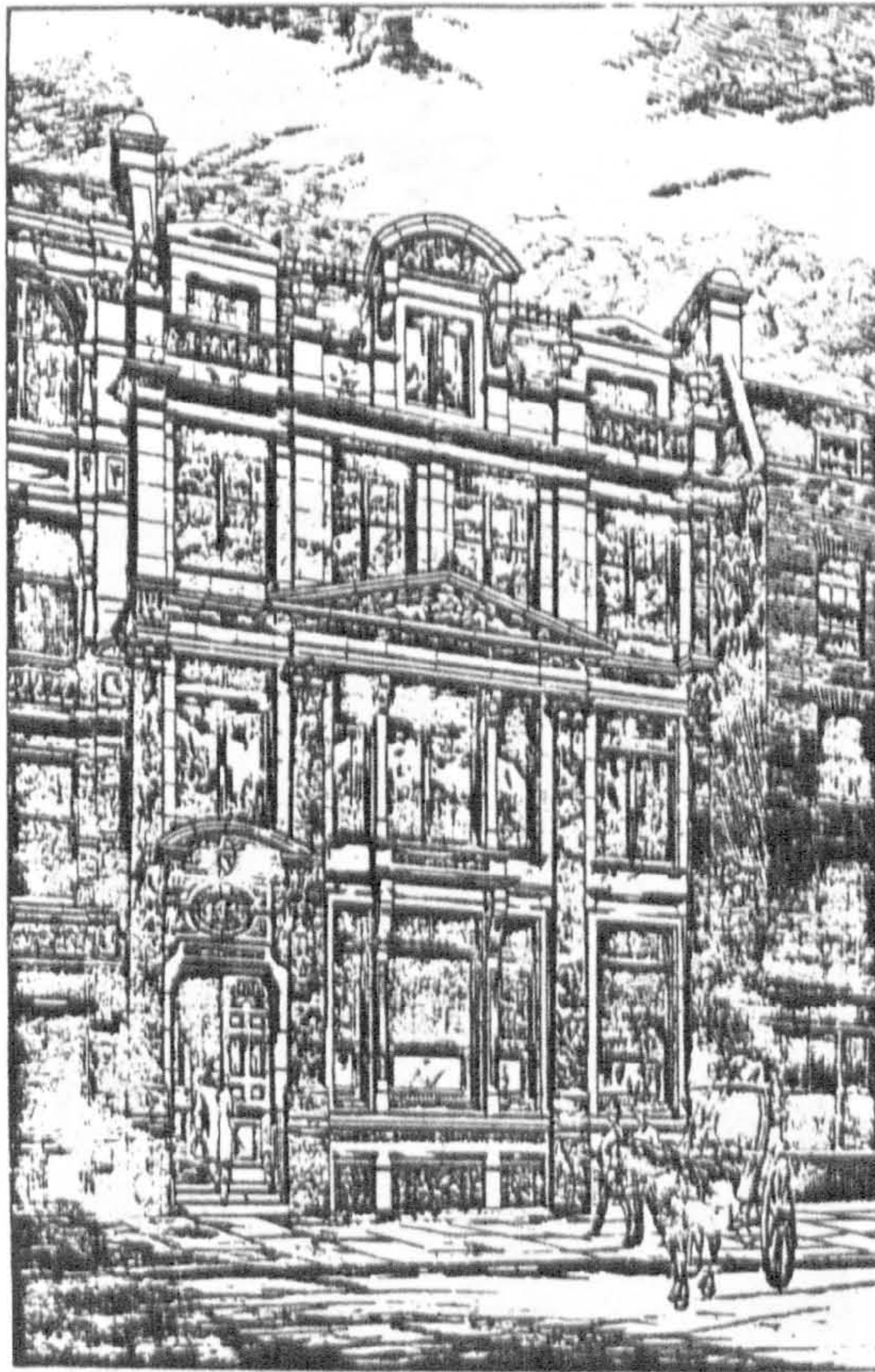
2-93

SWAN CHAMBERS, City, 1894

TOKEN HOUSE, City, 1892

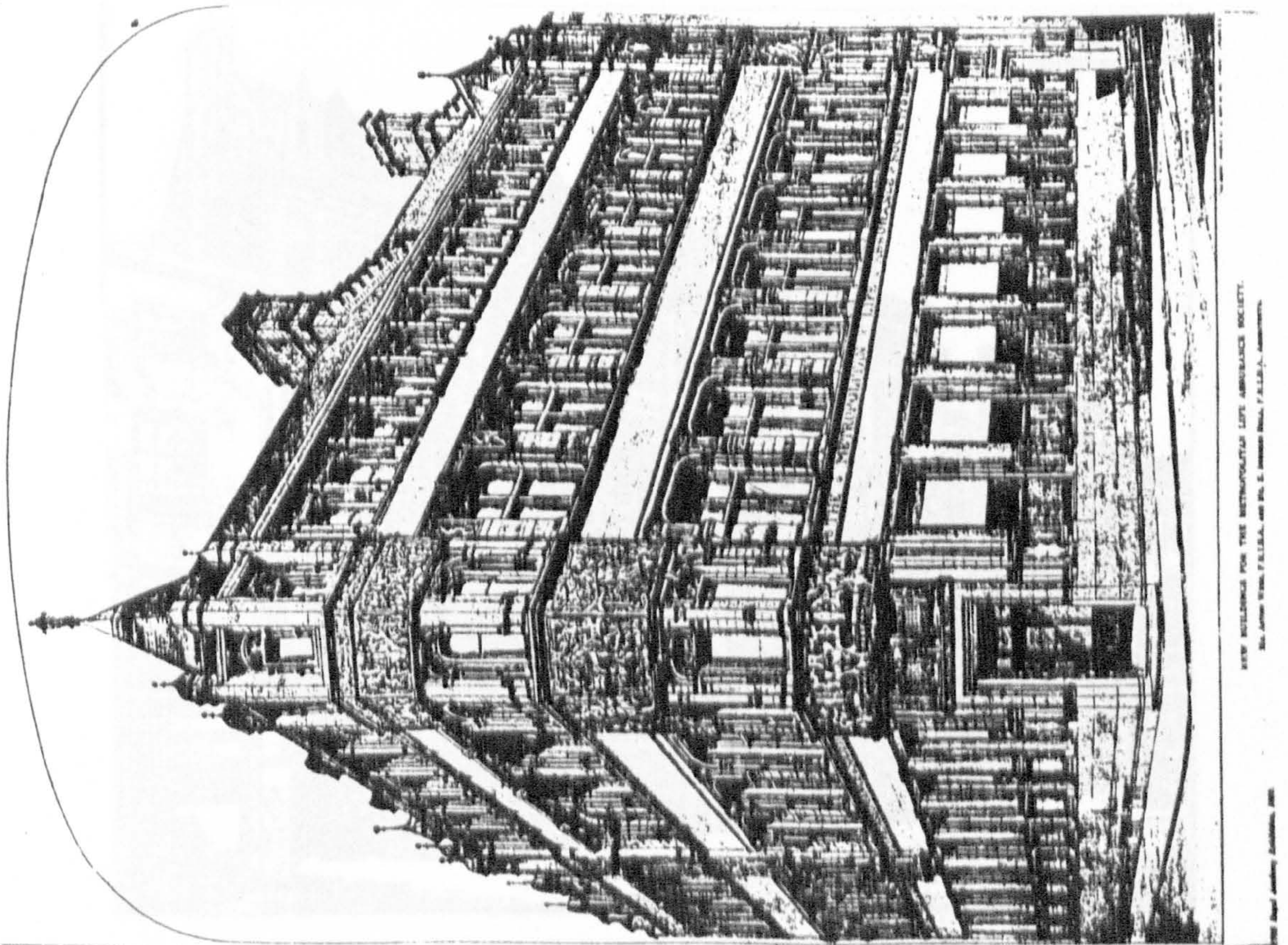
2-94





DESIGNED FOR THE COMMERCIAL BANKING COMPANY OF SYDNEY.—MR. W. W. GUYTON, F.R.S.A., ARCHT.

2-95
 COMMERCIAL BANKING CO. OF SYDNEY, City, 1887
 METROPOLITAN LIFE ASSURANCE SOCIETY, City, 1890
 2-96



NEW BUILDING FOR THE METROPOLITAN LIFE ASSURANCE SOCIETY.
 MR. JOHN W. W. GUYTON, F.R.S.A., AND MR. E. J. HARRIS, F.R.S.A., ARCHT.

From Royal Academy Exhibition, 1891

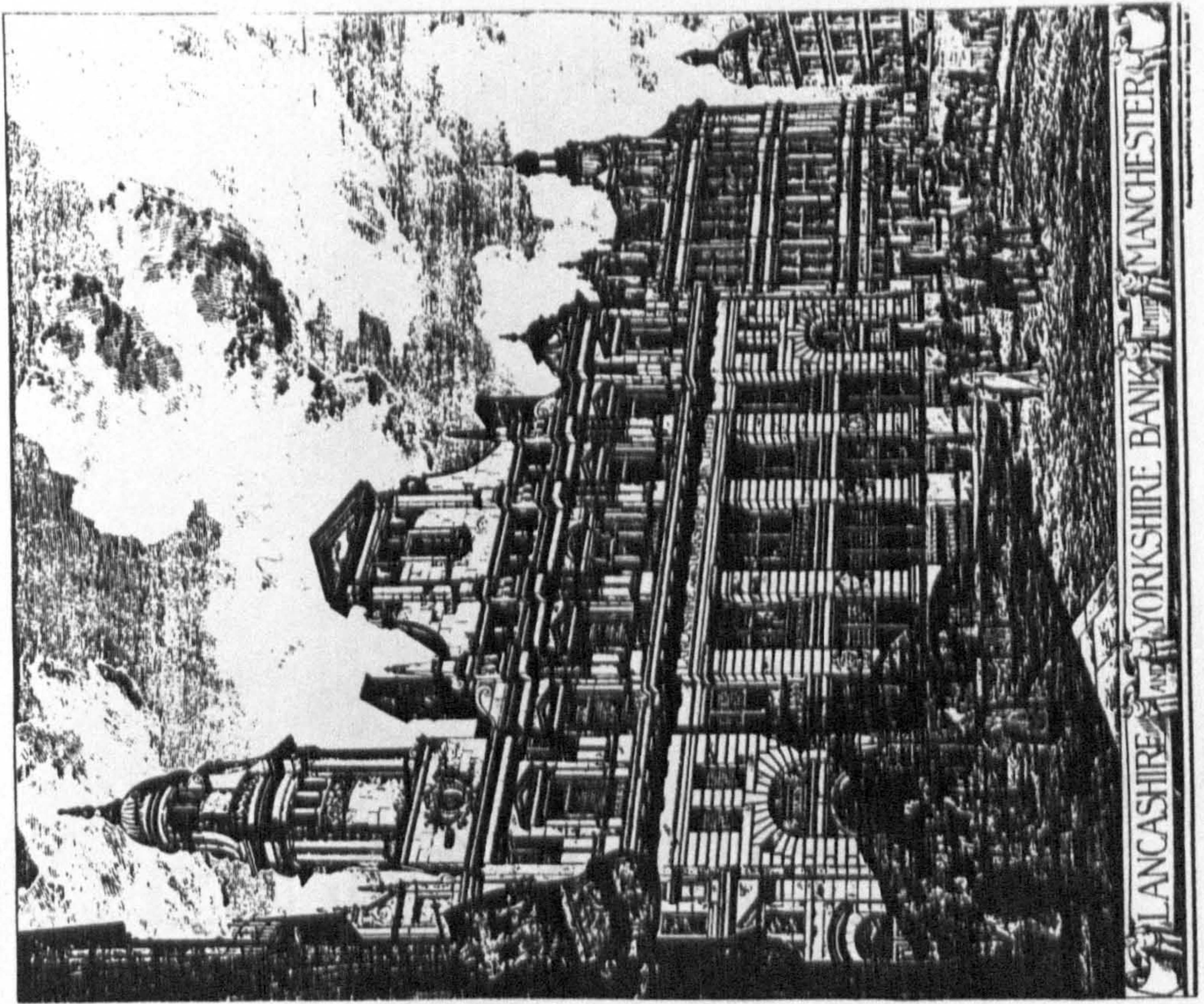


2-97

NATIONAL BANK OF INDIA, City, 1890
 QUEENS INSURANCE CO. SCOTTISH EQUITABLE ASSURANCE SOCIETY,
 SCOTTISH PROVIDENT ASSURANCE CO., Liverpool, 1862 to 1887

2-98





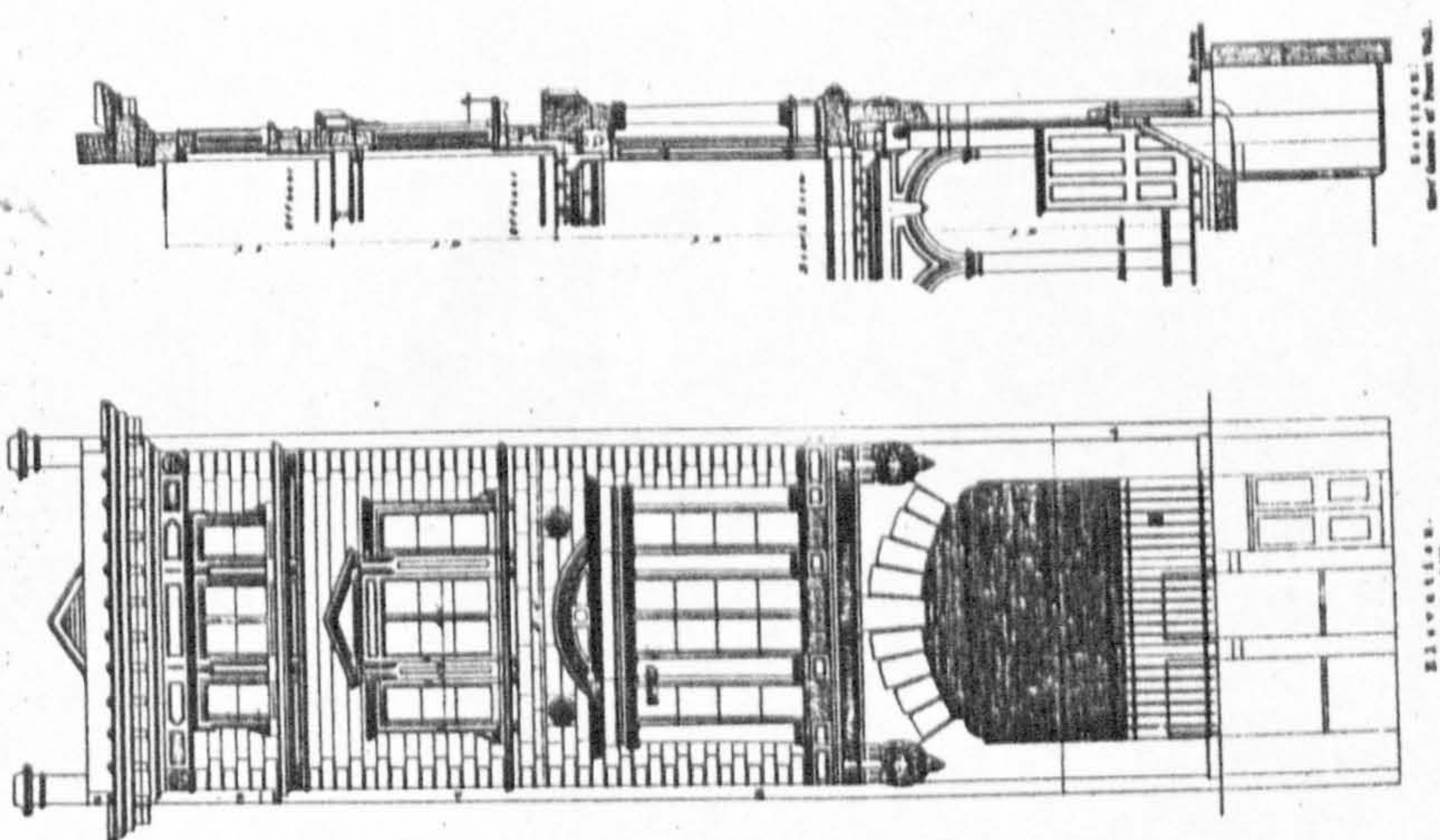
2-99

LANCASHIRE AND YORKSHIRE BANK, Manchester, 1888

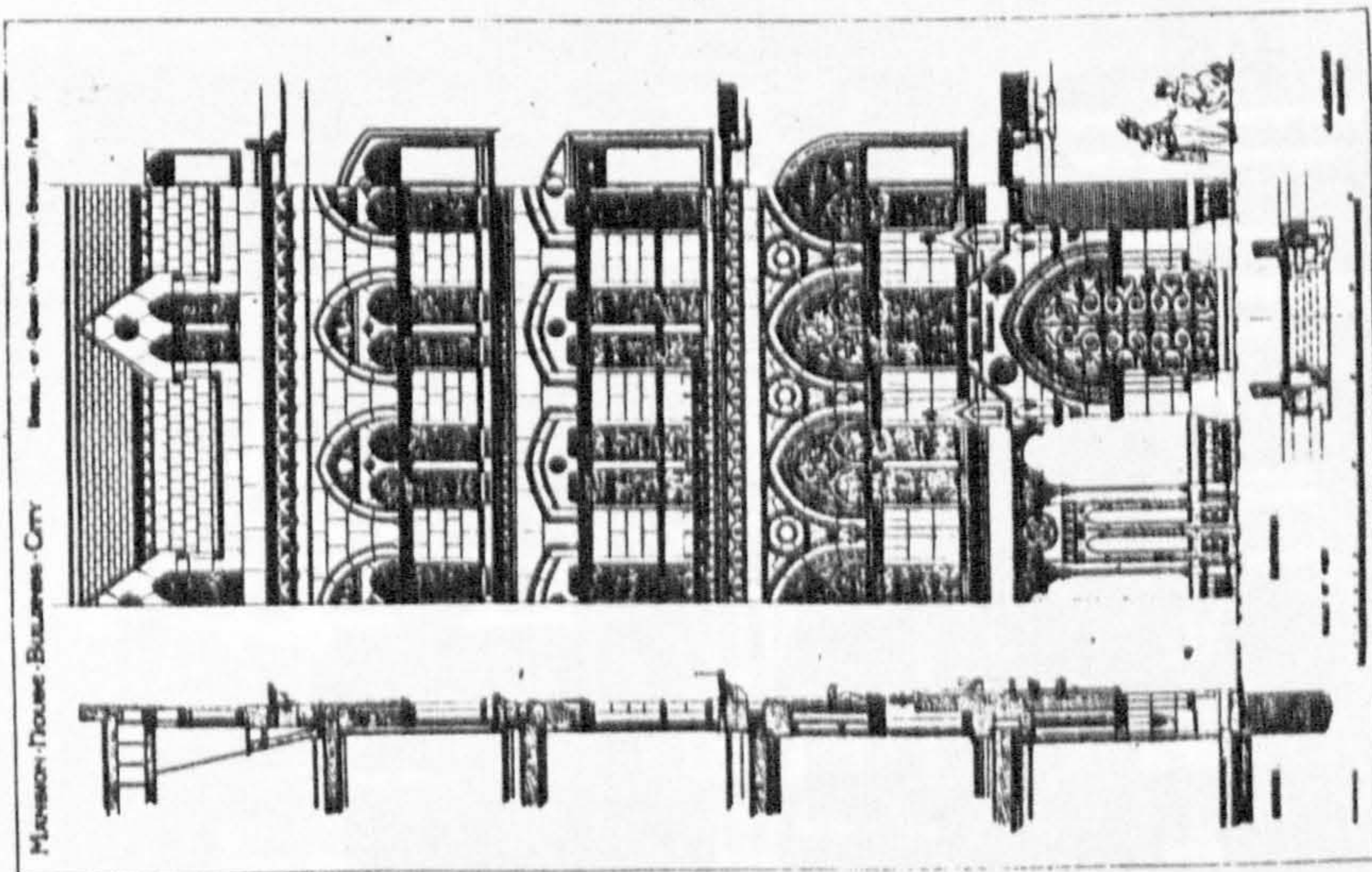
OLD BUILDING, 1844

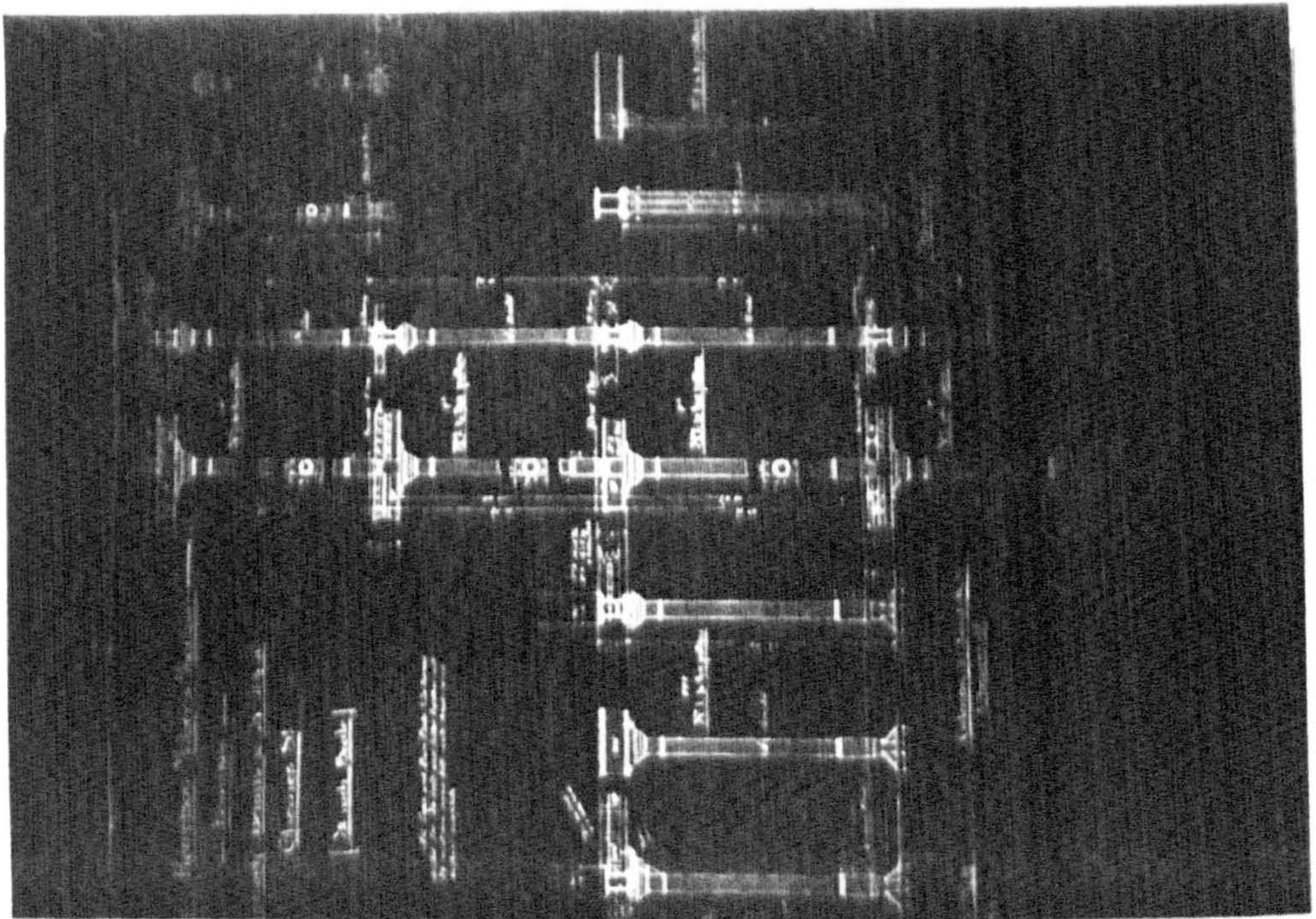
3-2

3-3
 SECTION
 EAST ELEVATION OF BANK BUILDING
 1878

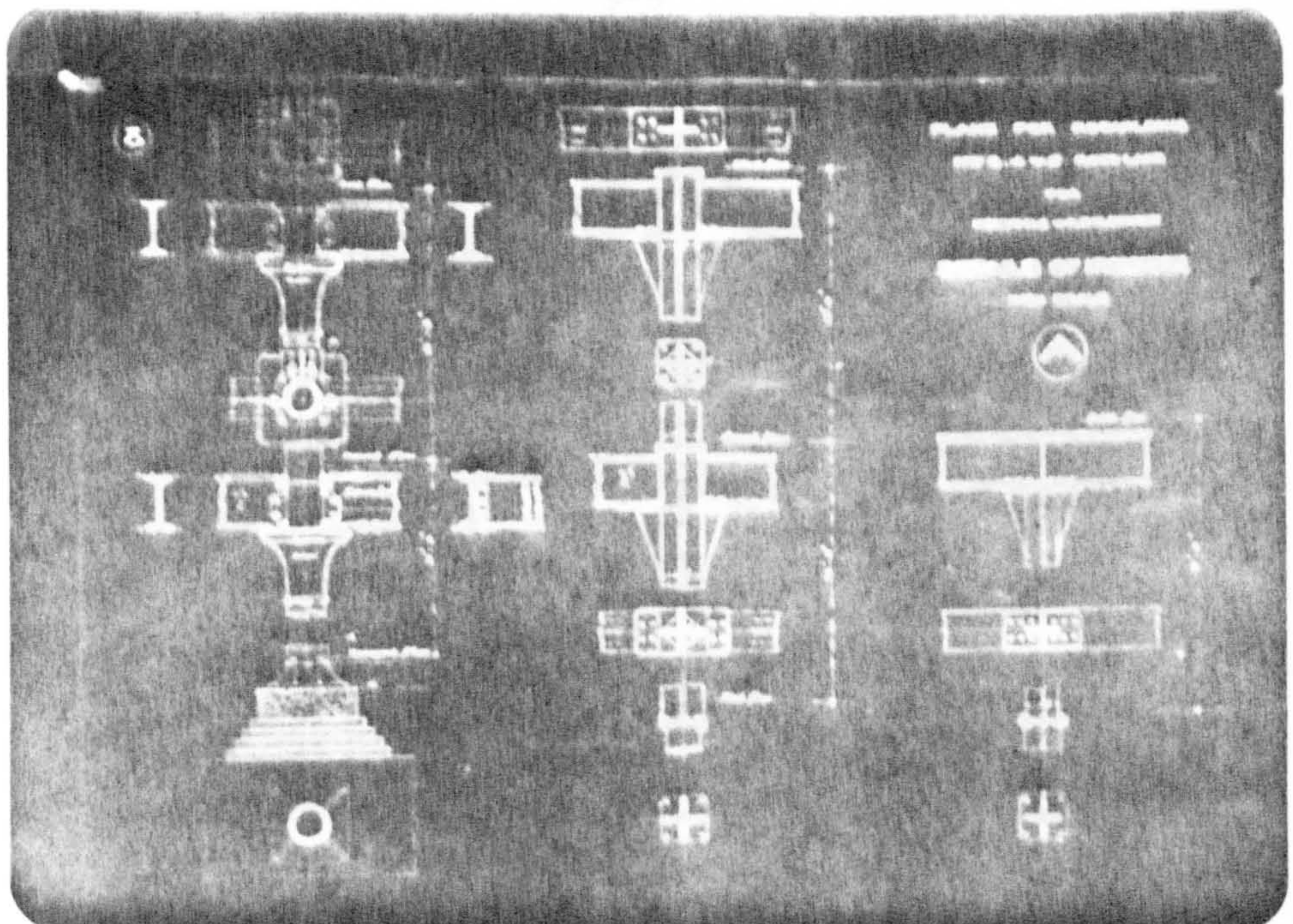


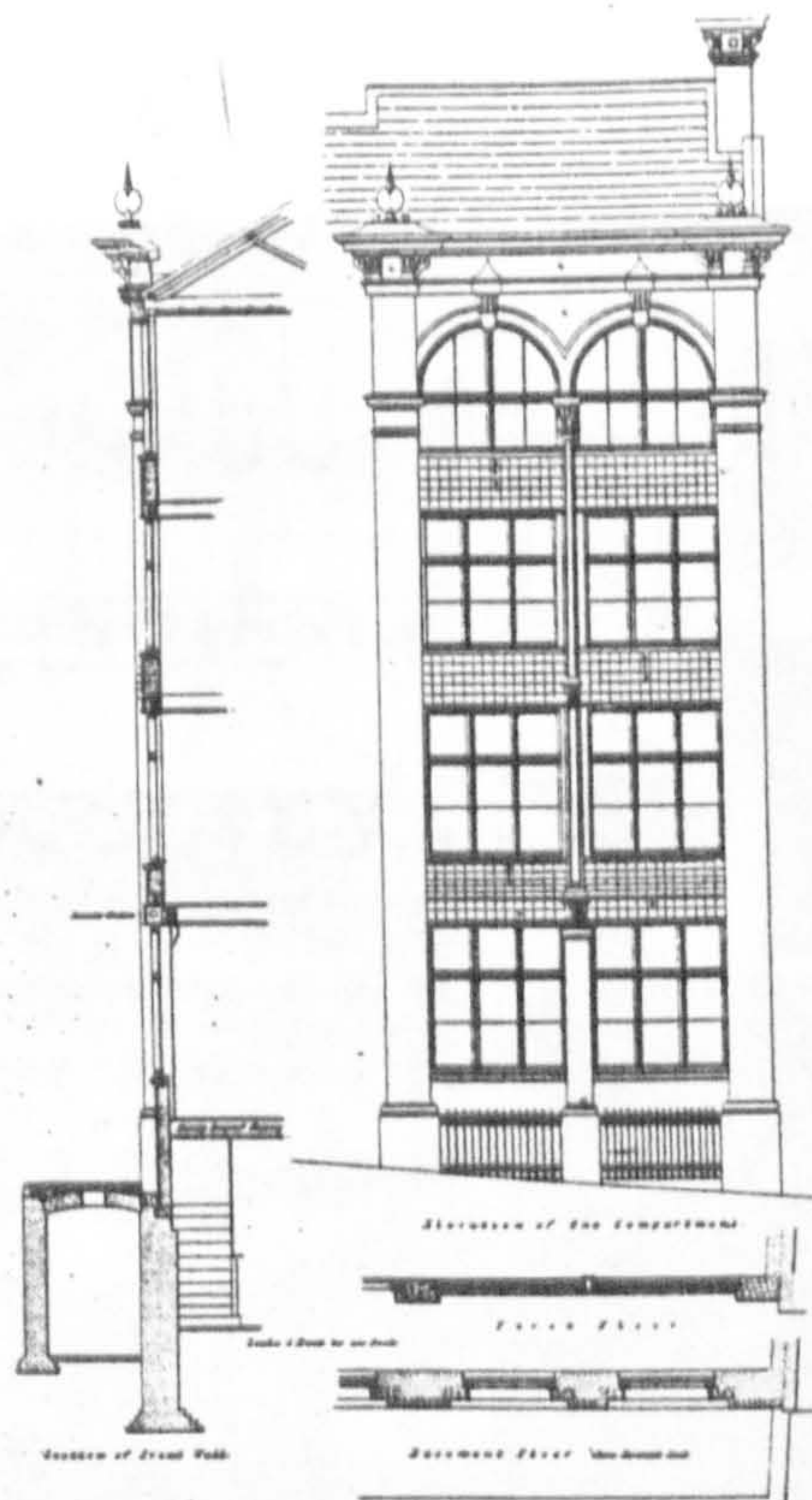
3-3
 ENGLISH SCOTTISH AND AUSTRALIAN CHARTERED BANK, City, 185-
 MANSION HOUSE BUILDINGS, 1878



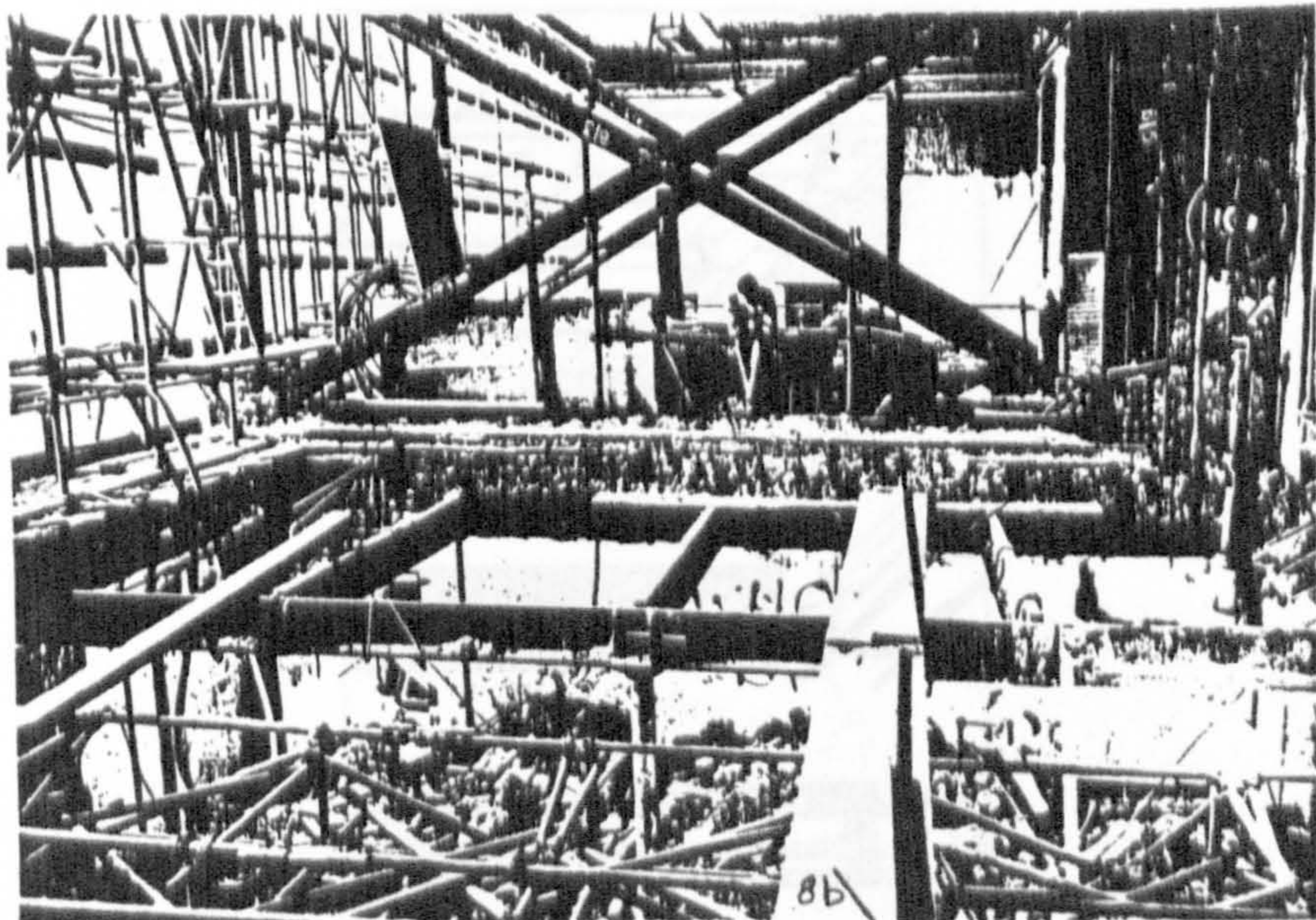


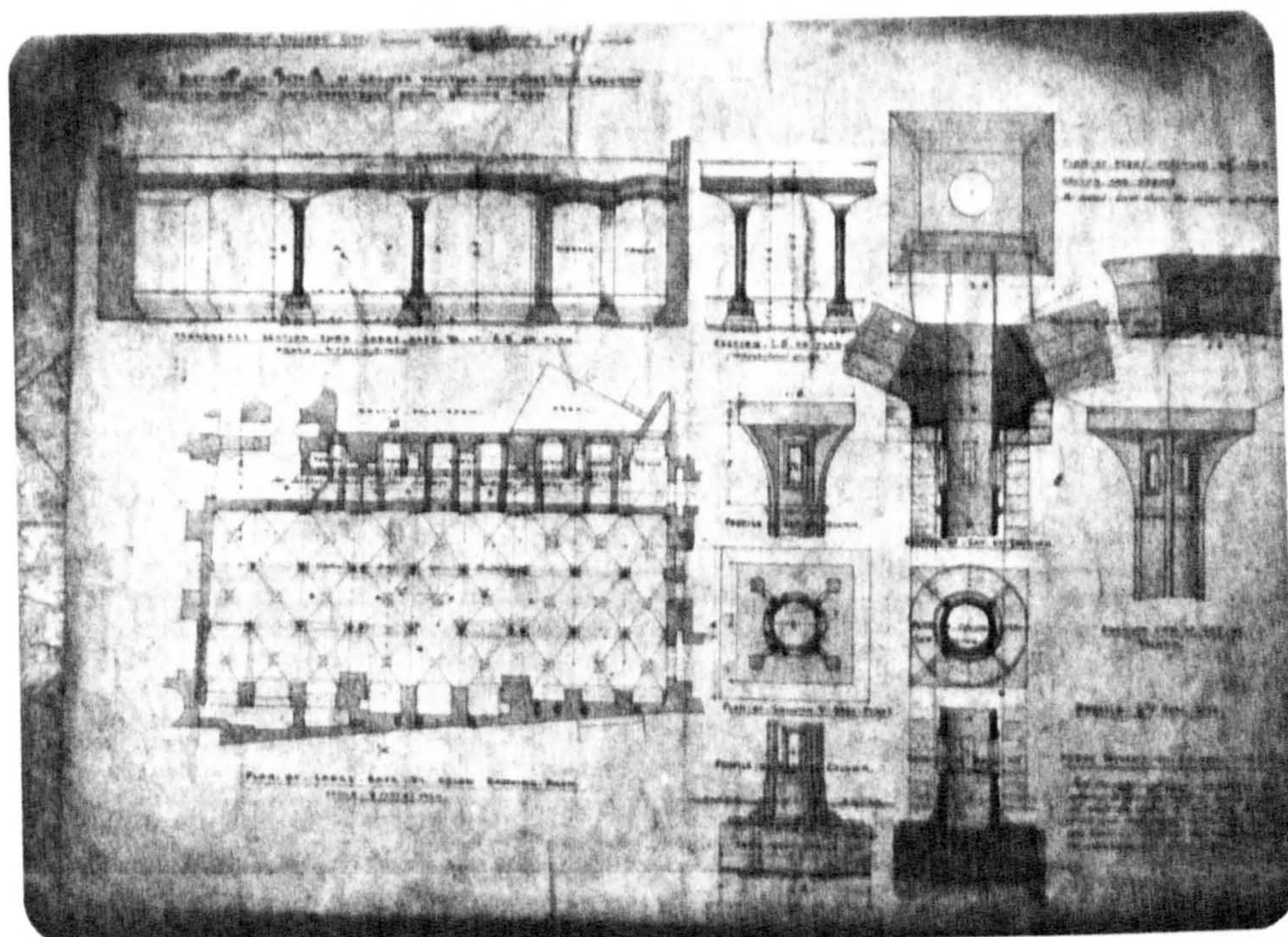
3-5
COLUMN AND BEAM CONNECTION
3/5 ROOD LANE, City, 1899
3-6



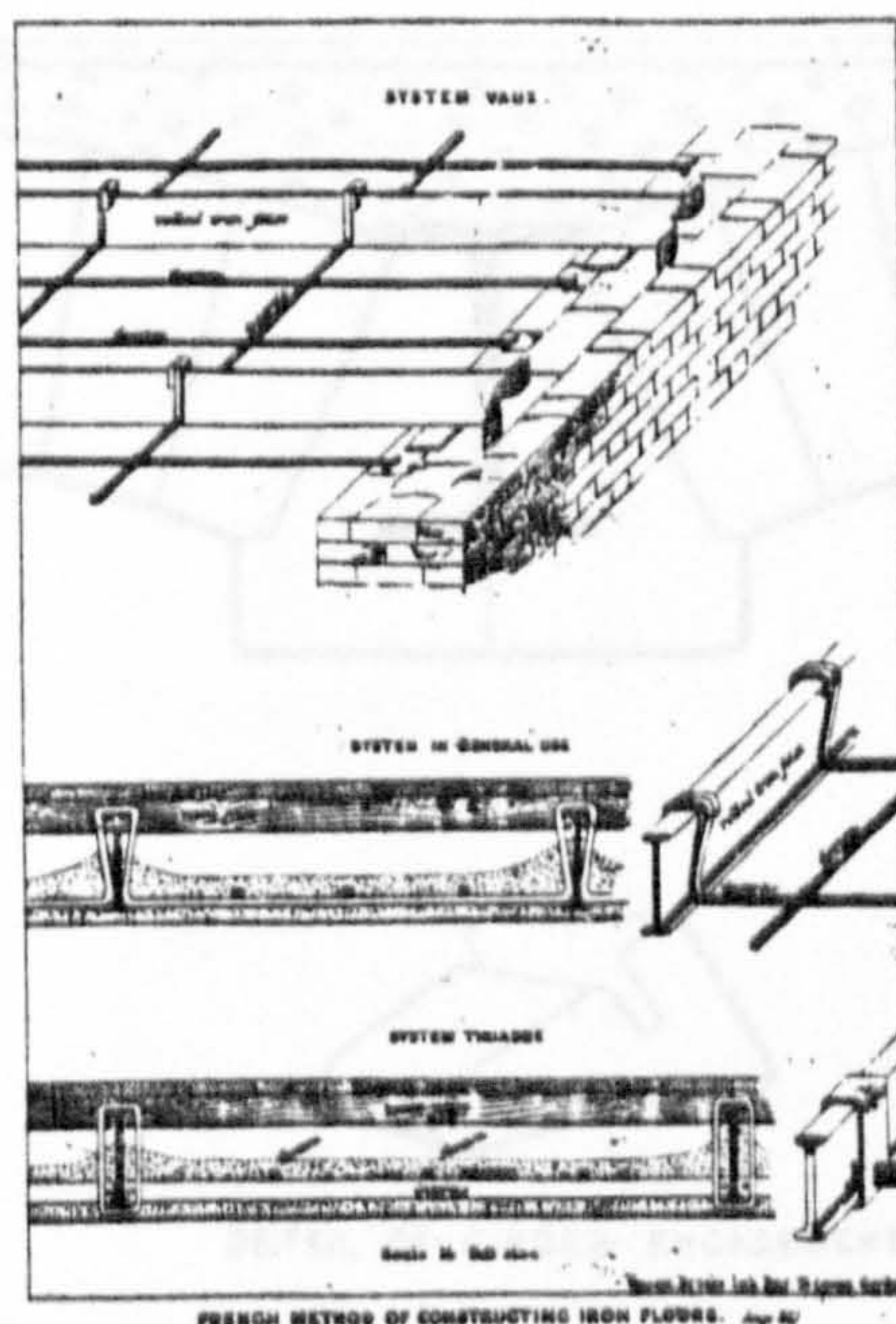


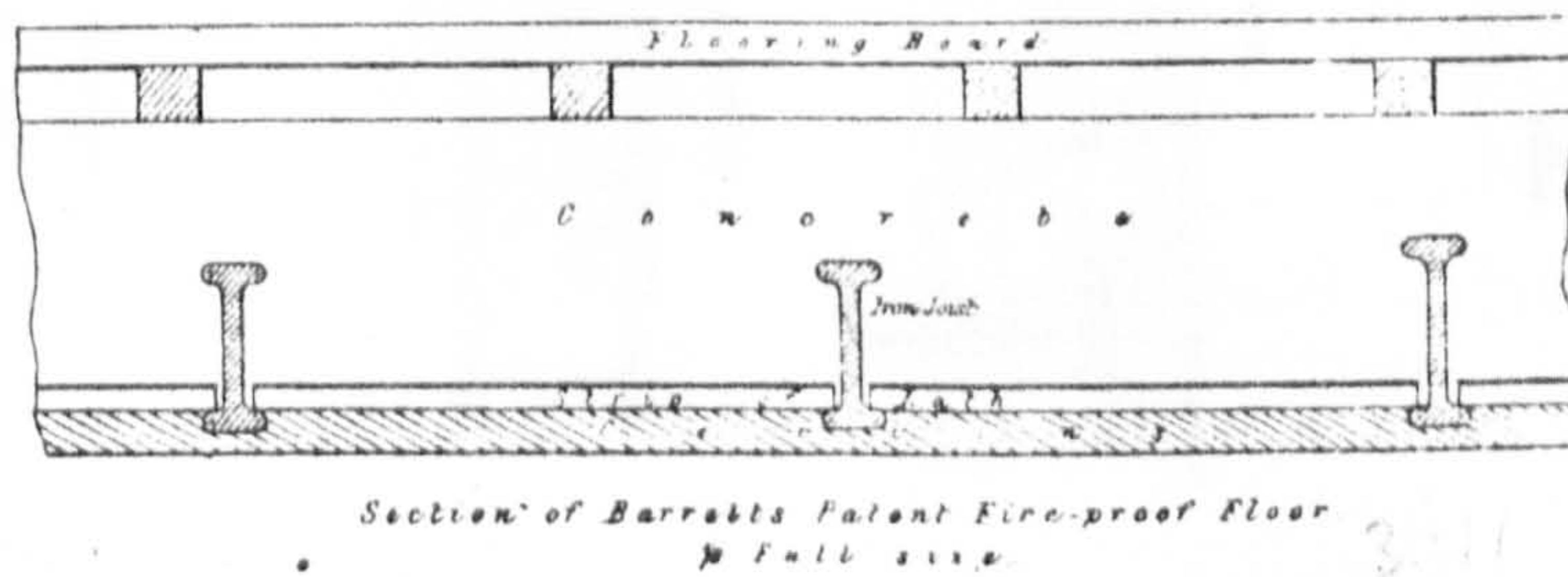
3-7
 WATER LANE OFFICE BUILDING, 185-
 37-39 LOMBARD ST., City, 1864
 3-8



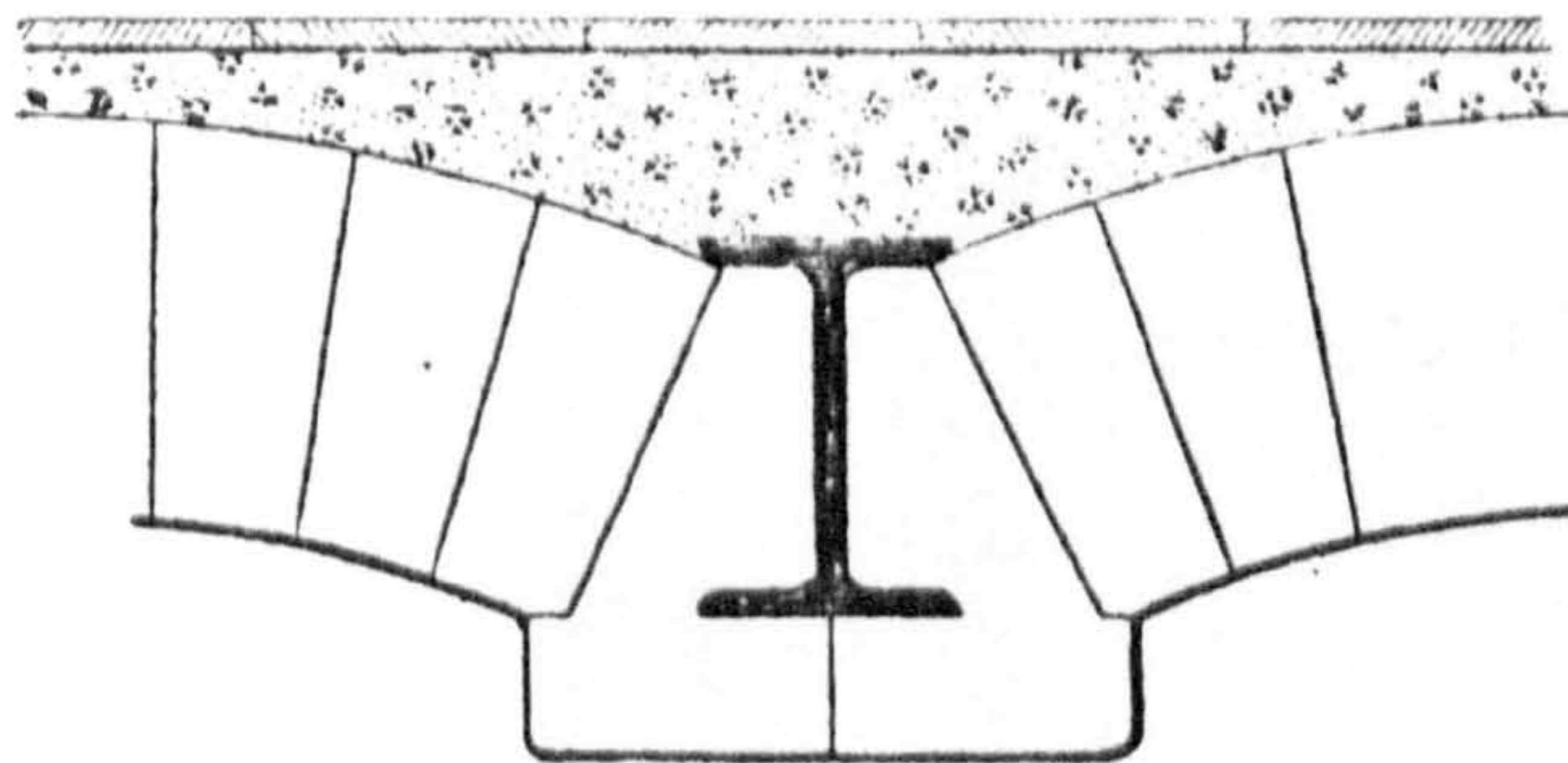


3-9
 NATIONAL PROVINCIAL BANK, City, 1863
 FRENCH FLOORS, 1854
 3-10





3-11
FOX AND BARRETT FLOOR AT WATER LANE OFFICES, 185-
WHICHCORD FLOOR, 1882
3-12



DETAIL OF GIRDER ENCASEMENT

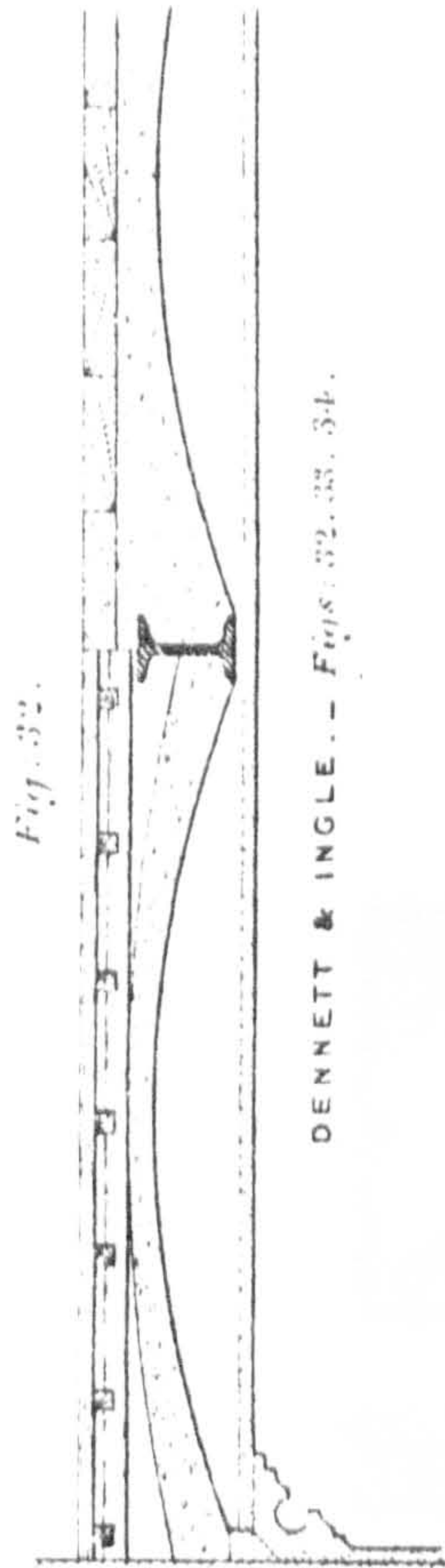
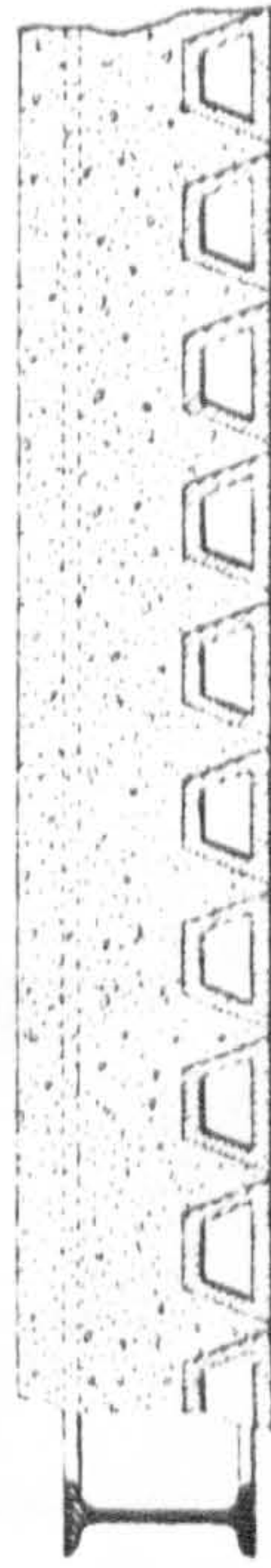


Fig. 32.

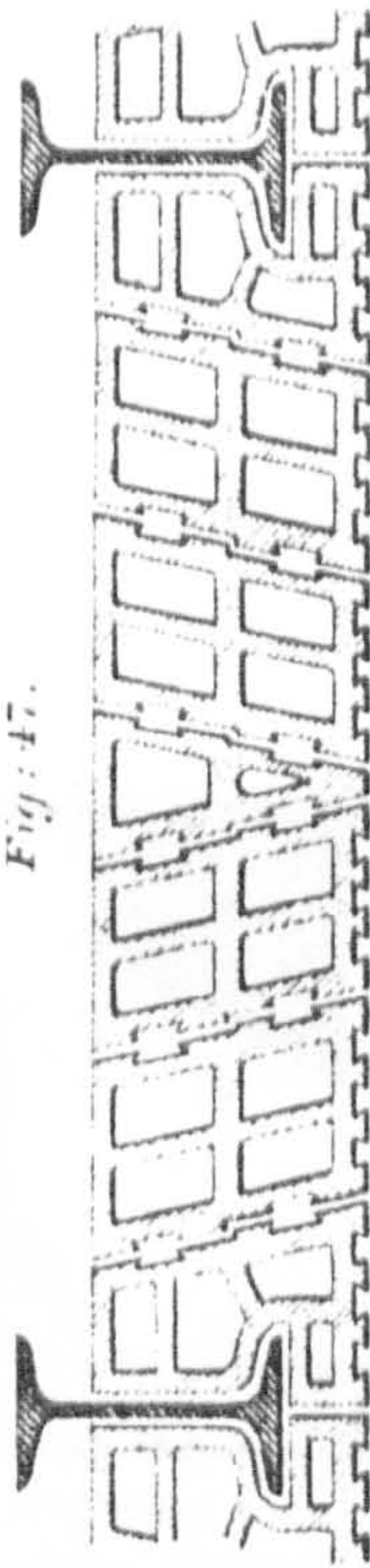
DENNETT & INGLE. - Figs. 32, 33, 34.

Fig. 26.



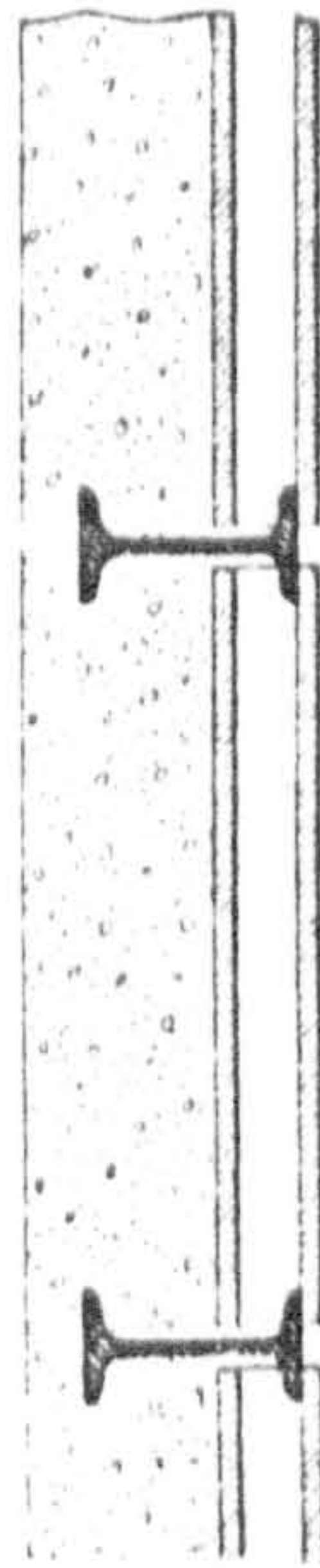
HOMAN & RODGERS. - Figs. 23, 24, 25, 26.

Fig. 47.

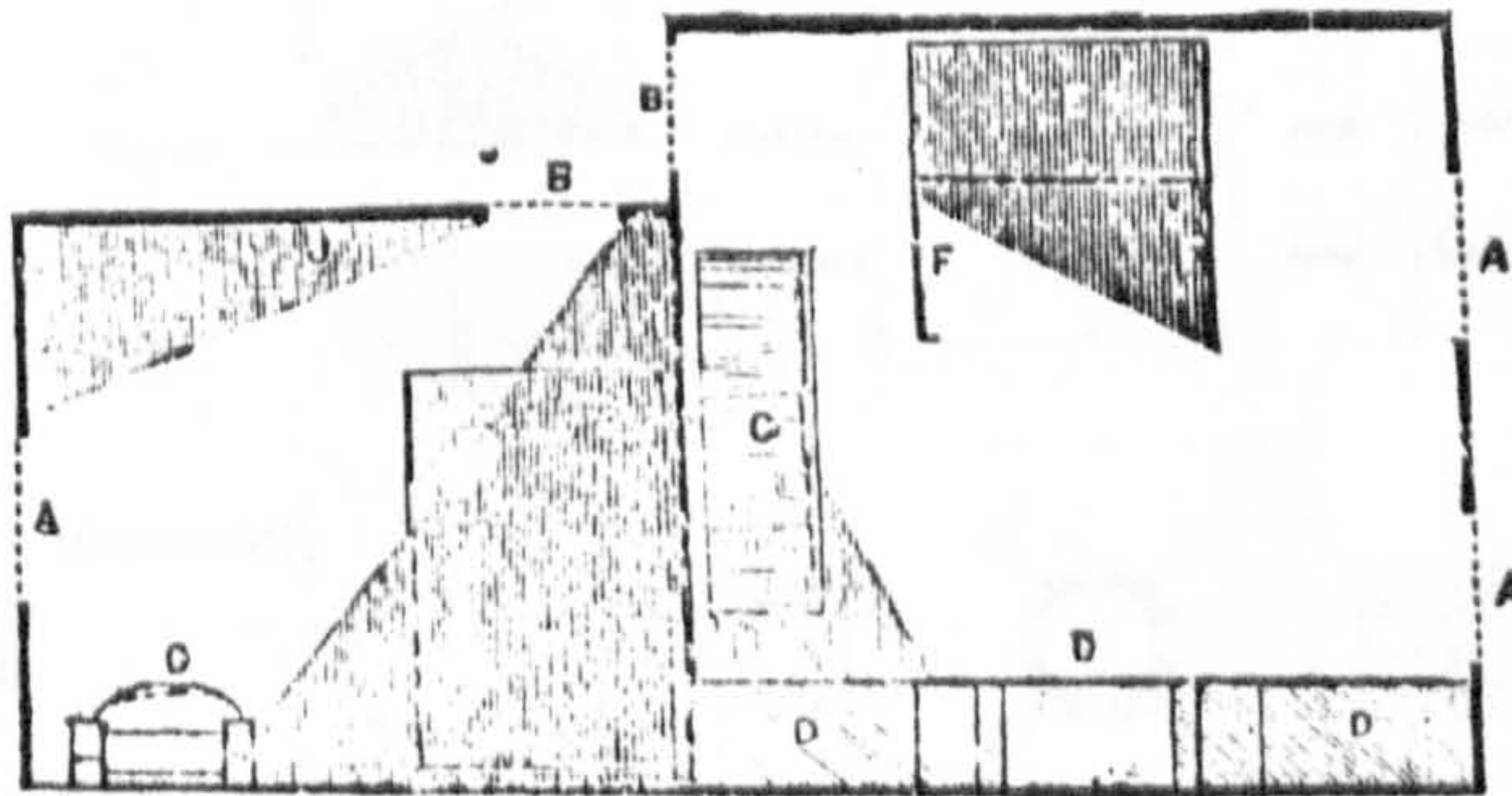


DOULTON - PETO. - Fig. 47.

Fig. 25.



3-13
FIREPROOF FLOORS, 1890



The Ventilation of Corners.

AAA. Windows. BB. Doors. CC. Fire-places. DD. Cupboards. E. Press bedstead. FF. Folding-doors of the bedstead when open. G. Sofa bedstead. H. Bedstead. I. A partition, without any opening. J. Spot to which the bed was removed.

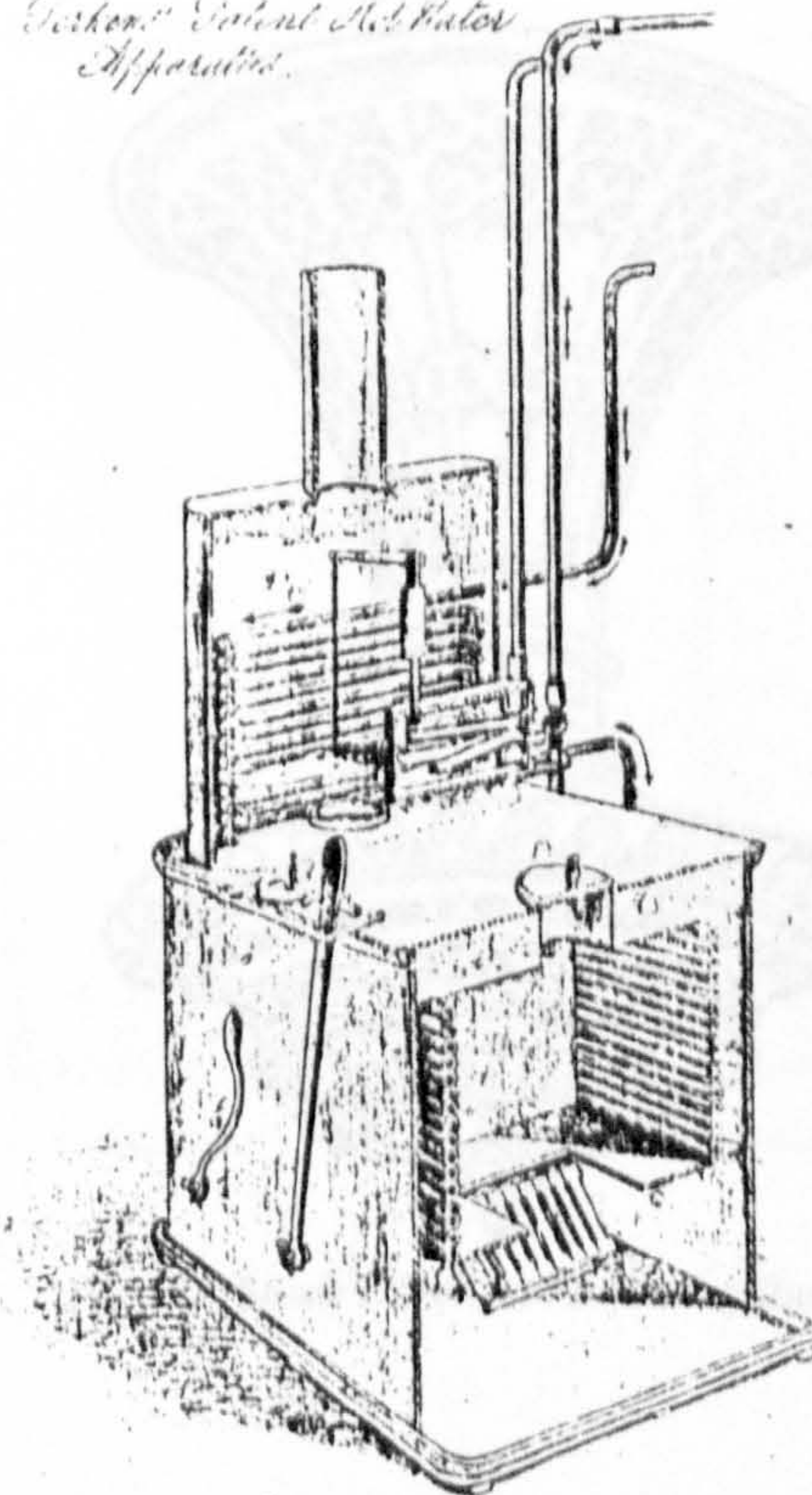
4-1

IRREGULAR AIR FLOW, 1864
PERKINS HOT WATER WARMING, 1840

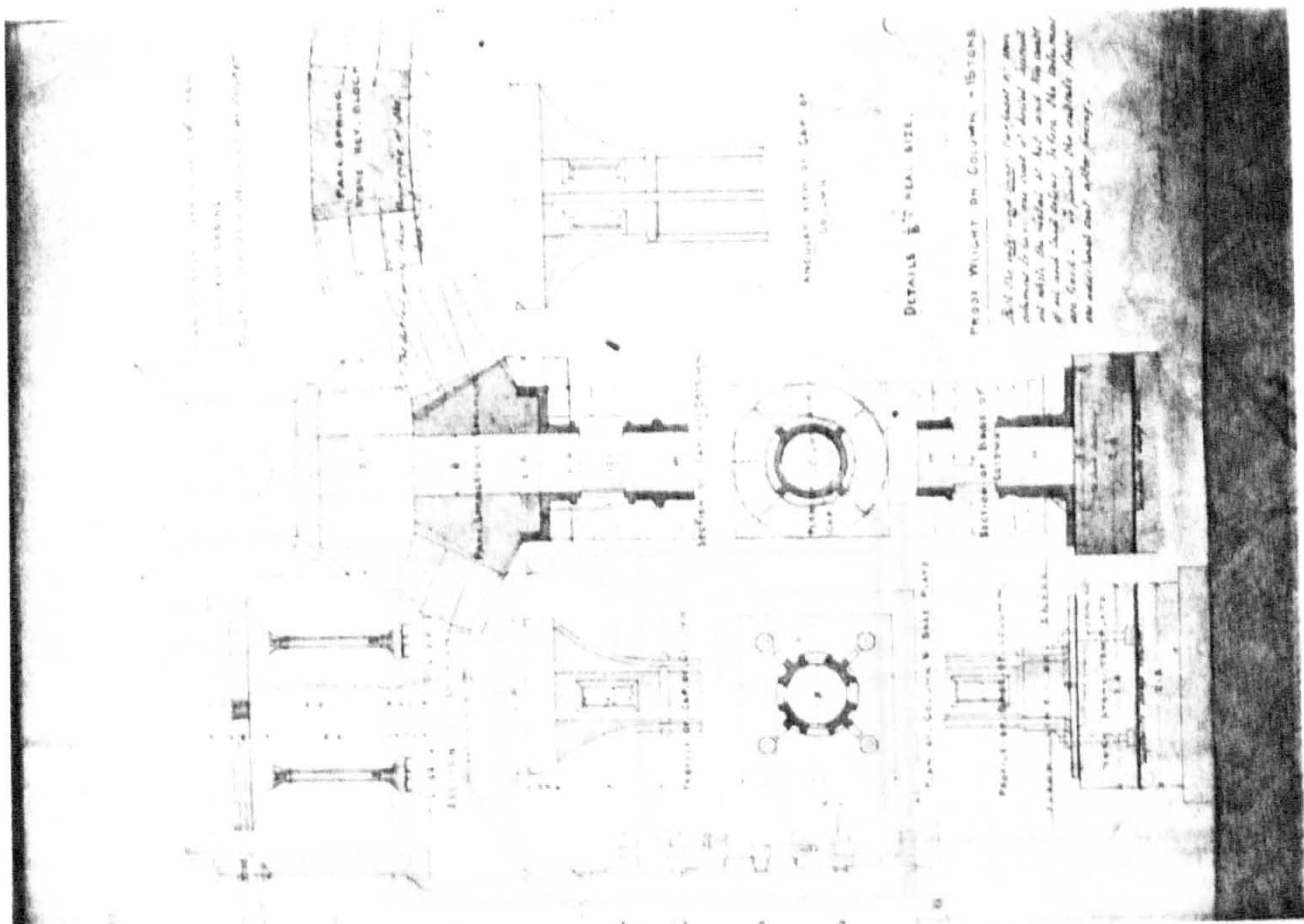
4-2

*Perkins' Patent Hot Water
Apparatus.*

Plate 3.



Section in the line C.D. see plan.

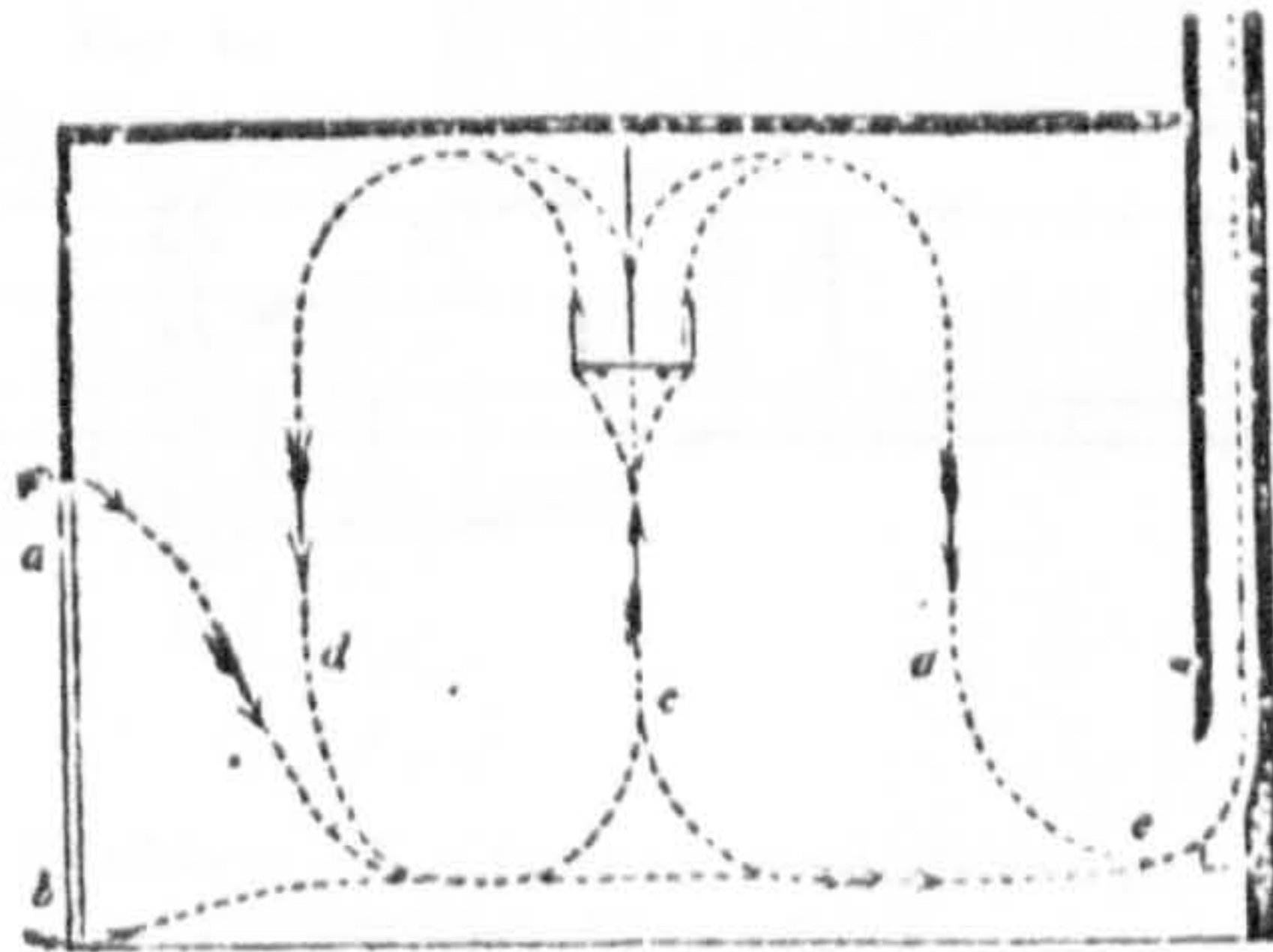


4-3
NATIONAL PROVINCIAL BANK, City, 1863
SUNBURNER

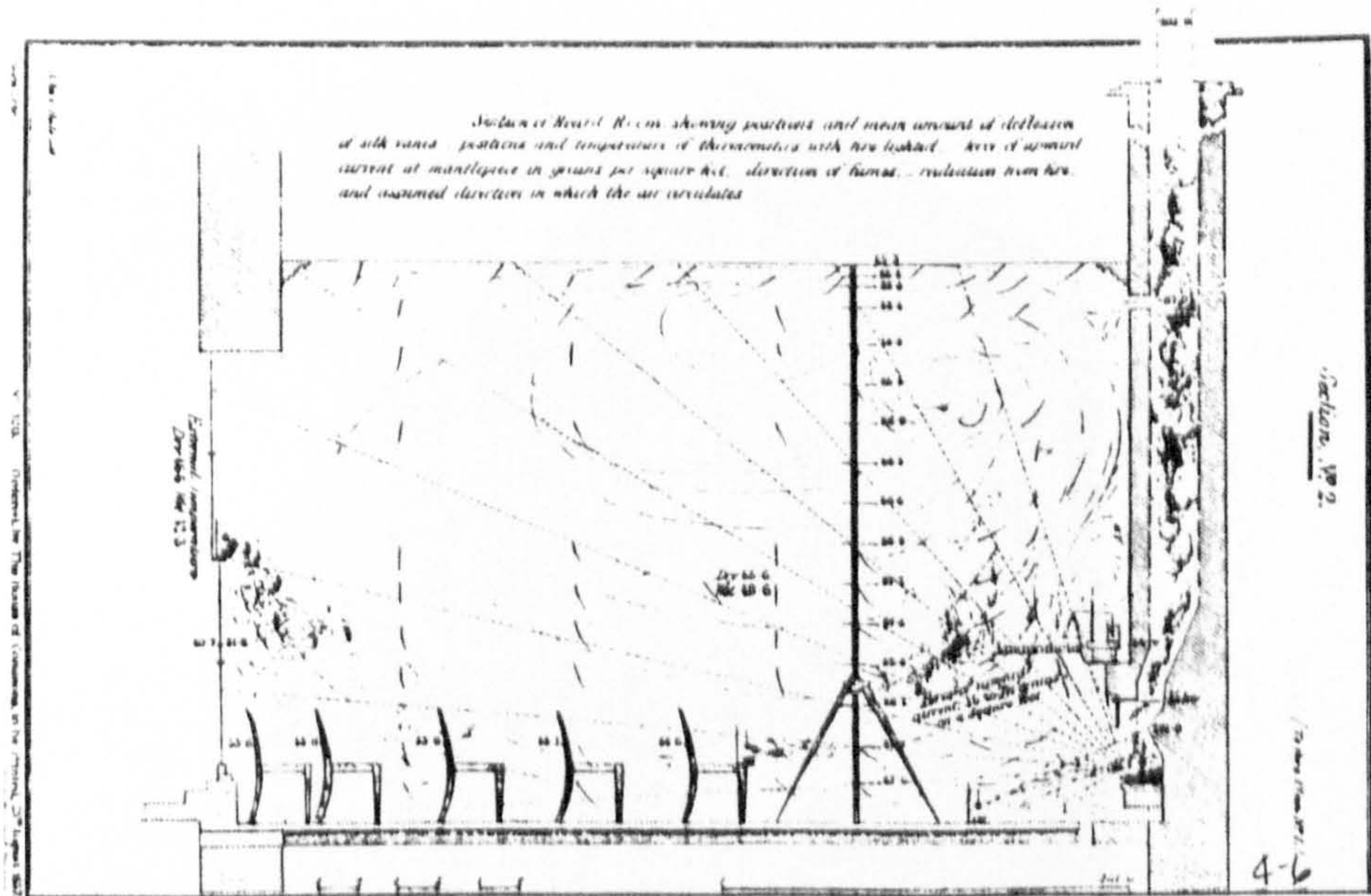
4-4

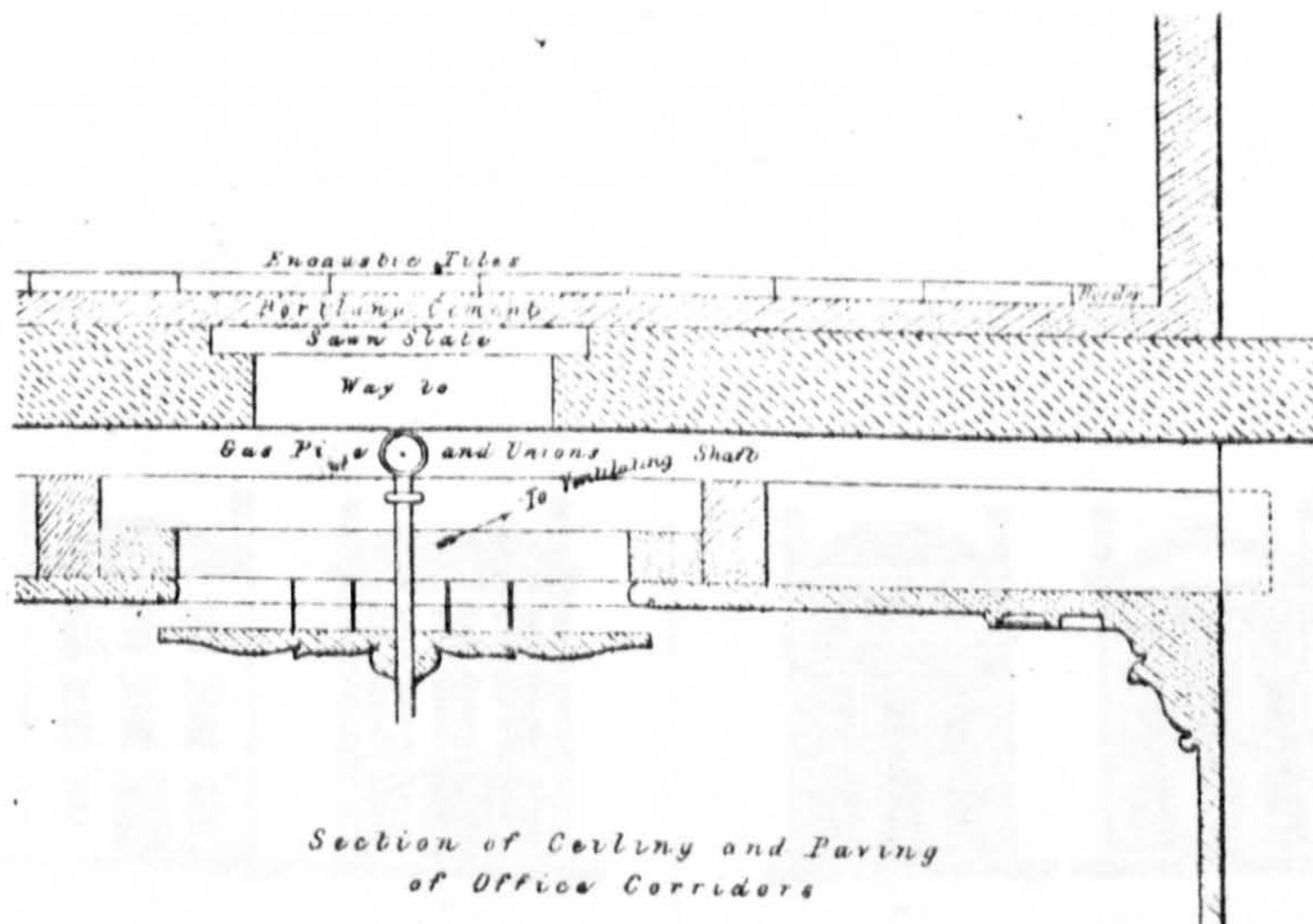


Fig. 25.—Shode's Sunlight Ventilating Burner.

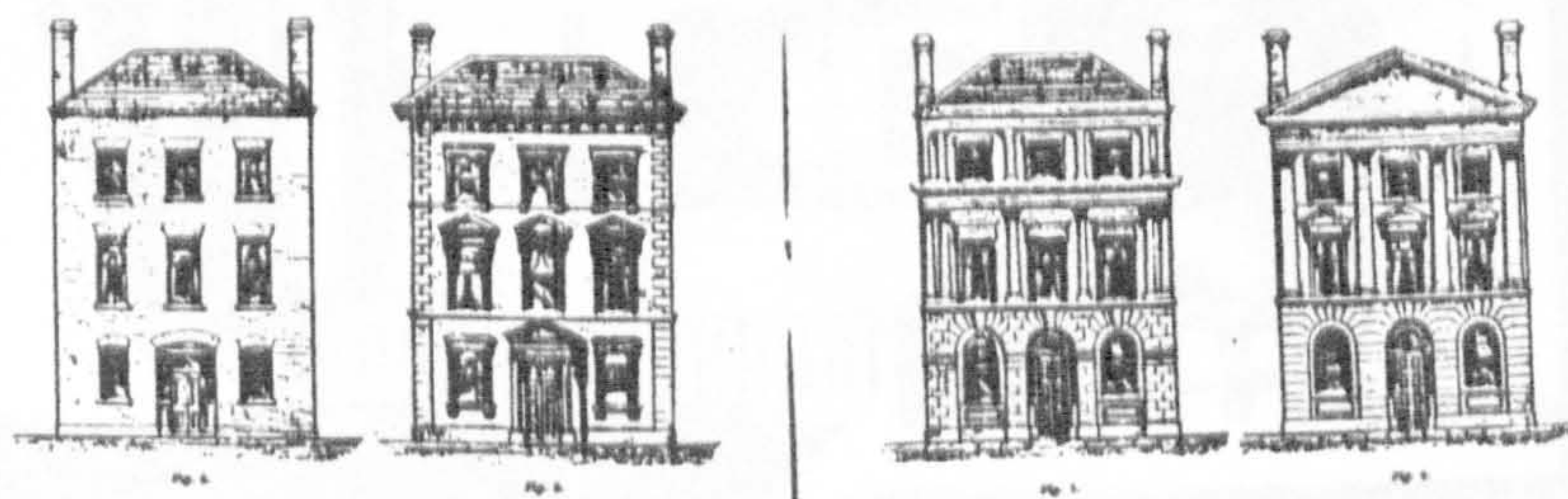


4-5
 AIRFLOW FROM GAS BURNER TO FIREPLACE
 CHIMNEY VENTILATOR, 1857
 4-6





4-7
CEILING VENTILATOR, 1854



5-1

STABILITY THROUGH DECORATION
ATLAS FIRE OFFICE, City, 1838

5-2

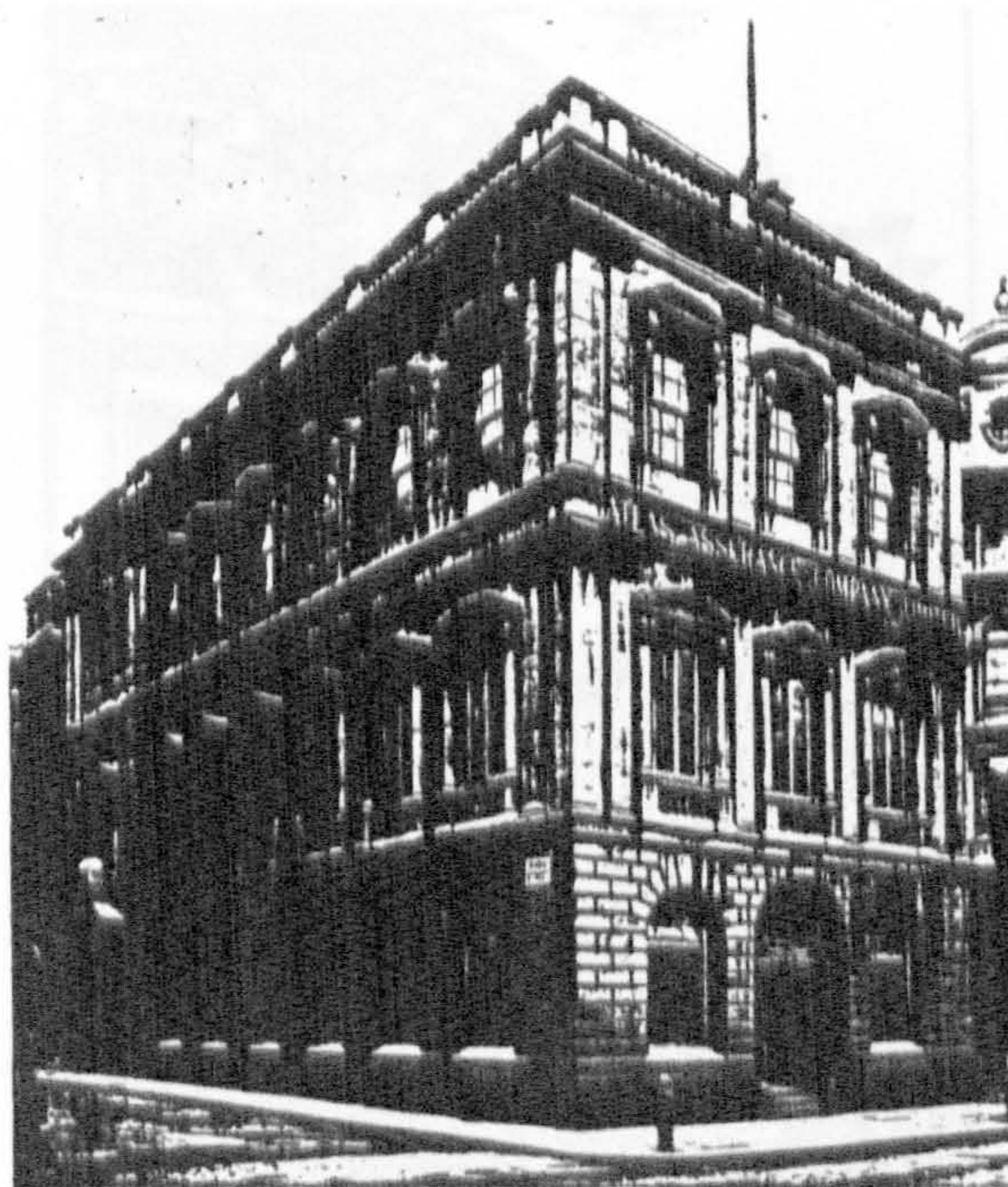
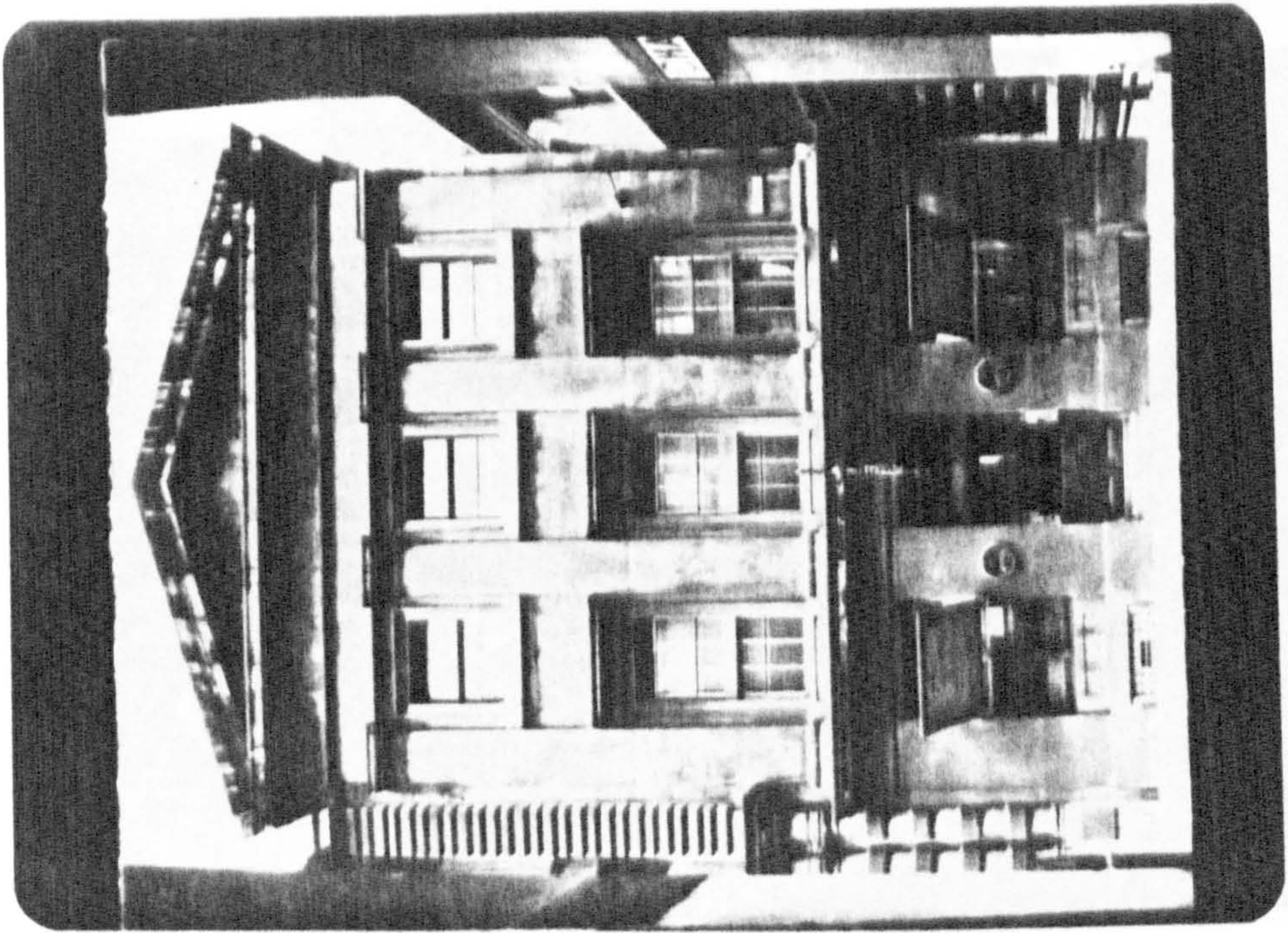


FIG. 110. THE ATLAS FIRE OFFICE, CHEAPSIDE, 1838

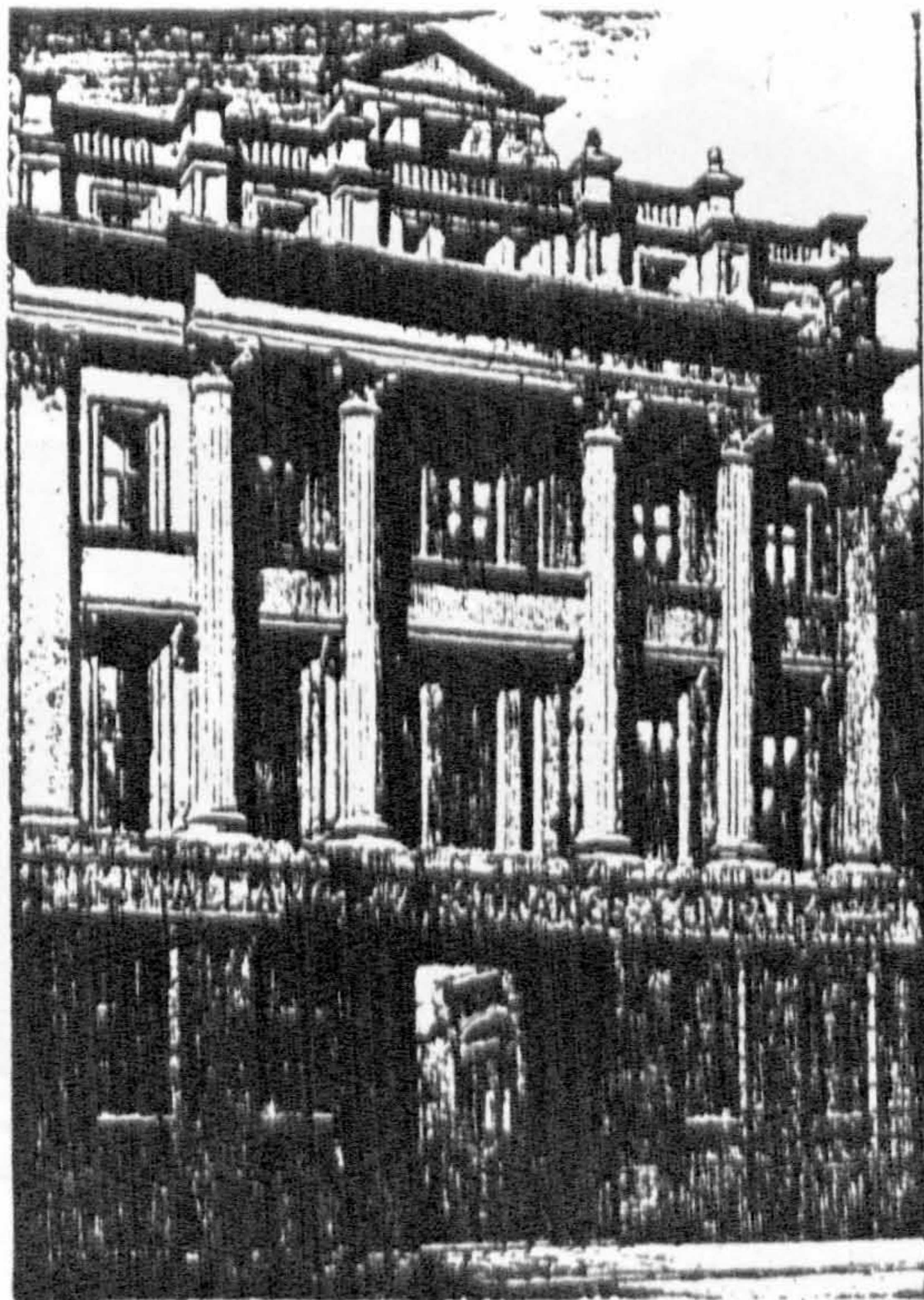
Thomas Hopper, Architect



5-3

PHOENIX ASSURANCE CO., City, 1838
 ALLIANCE ASSURANCE CO., City, 183-

5-4



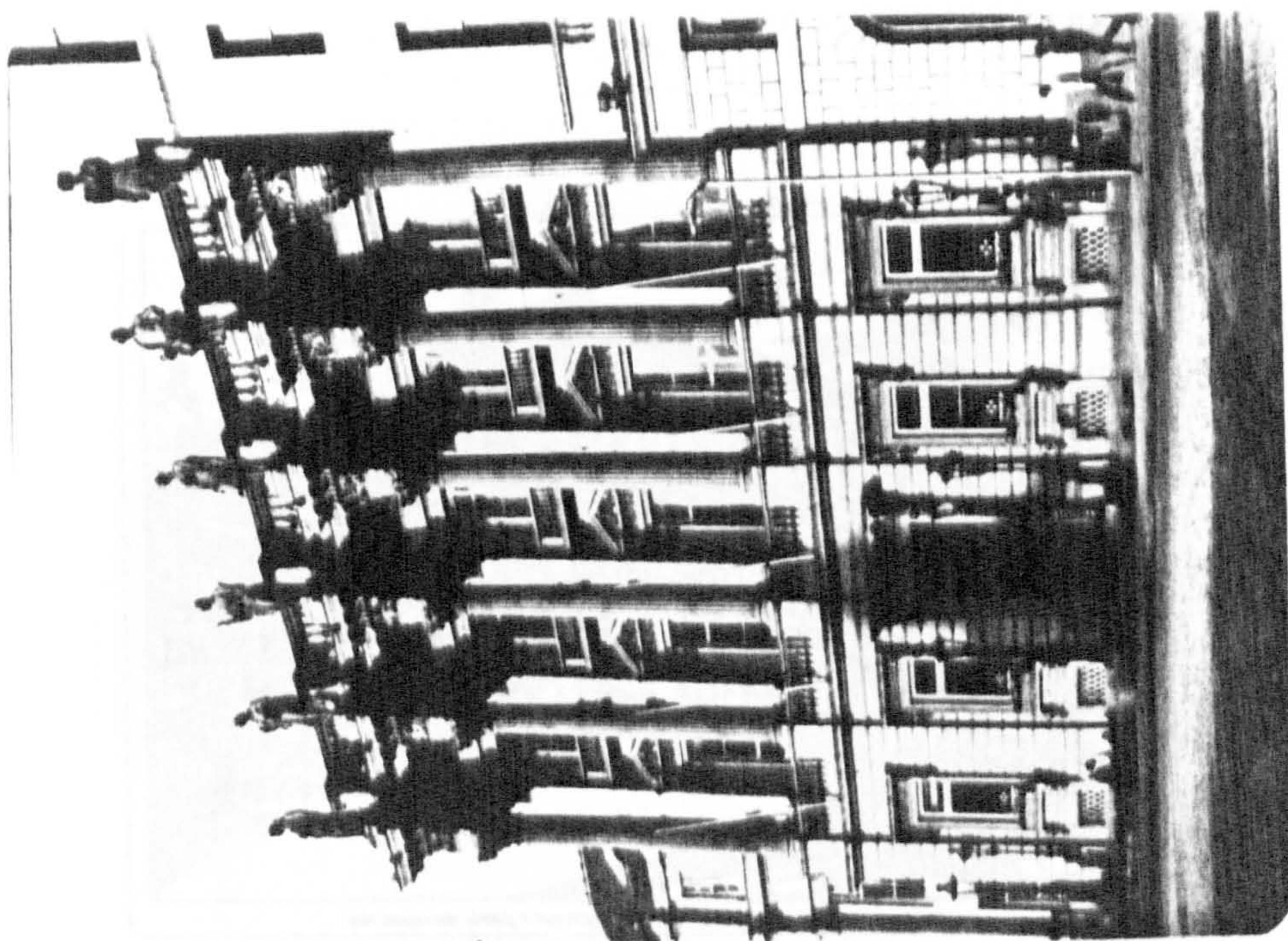
Head Office, Bartholomew Lane.



5-5
 MERCHANTS HOUSE, Glasgow, 1844
 COMMERCIAL BANK OF SCOTLAND, Edinburgh, 1844
 5-6



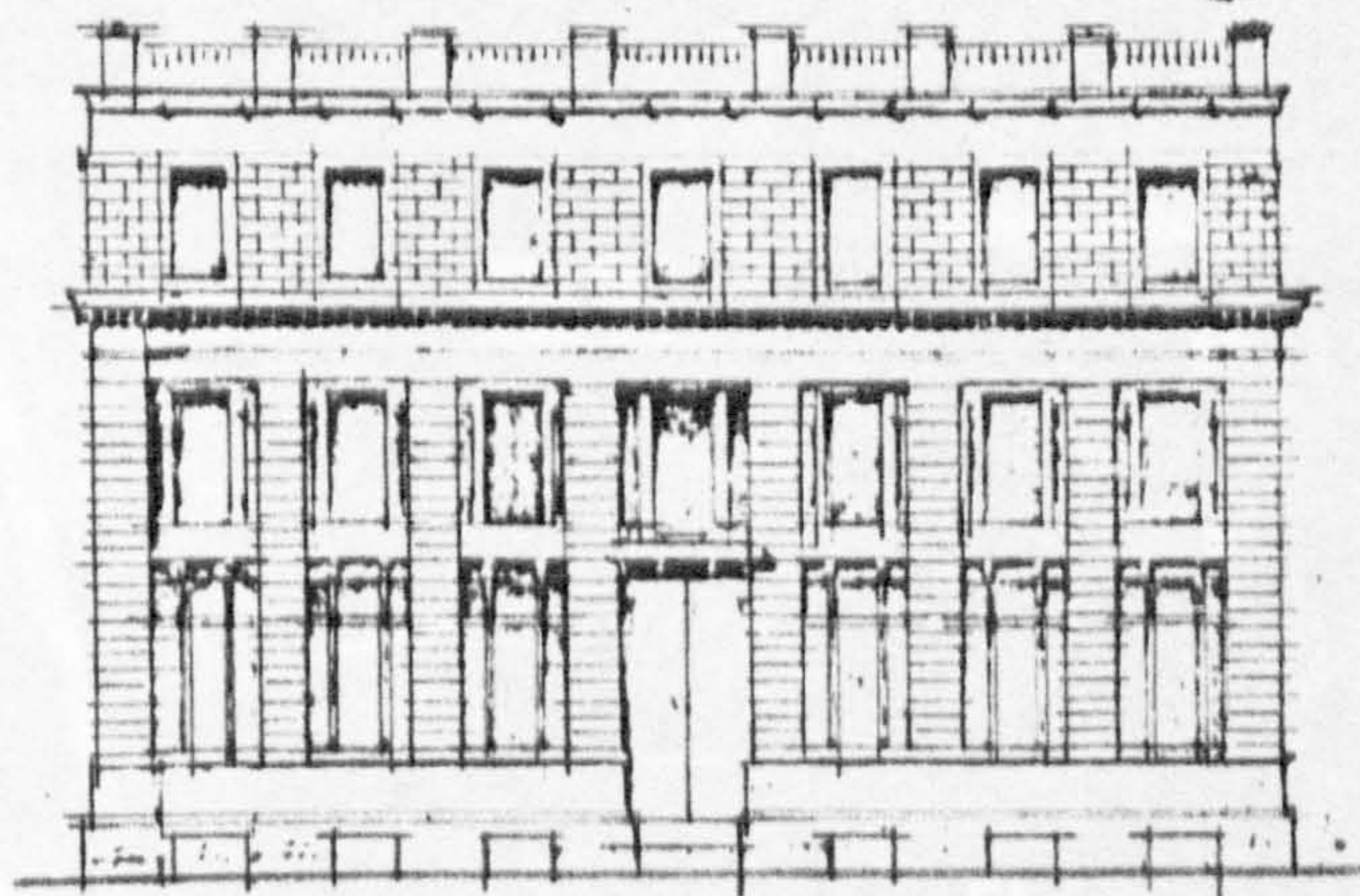
Commercial Bank of Scotland, Edinburgh. 1844. Design for exterior front.



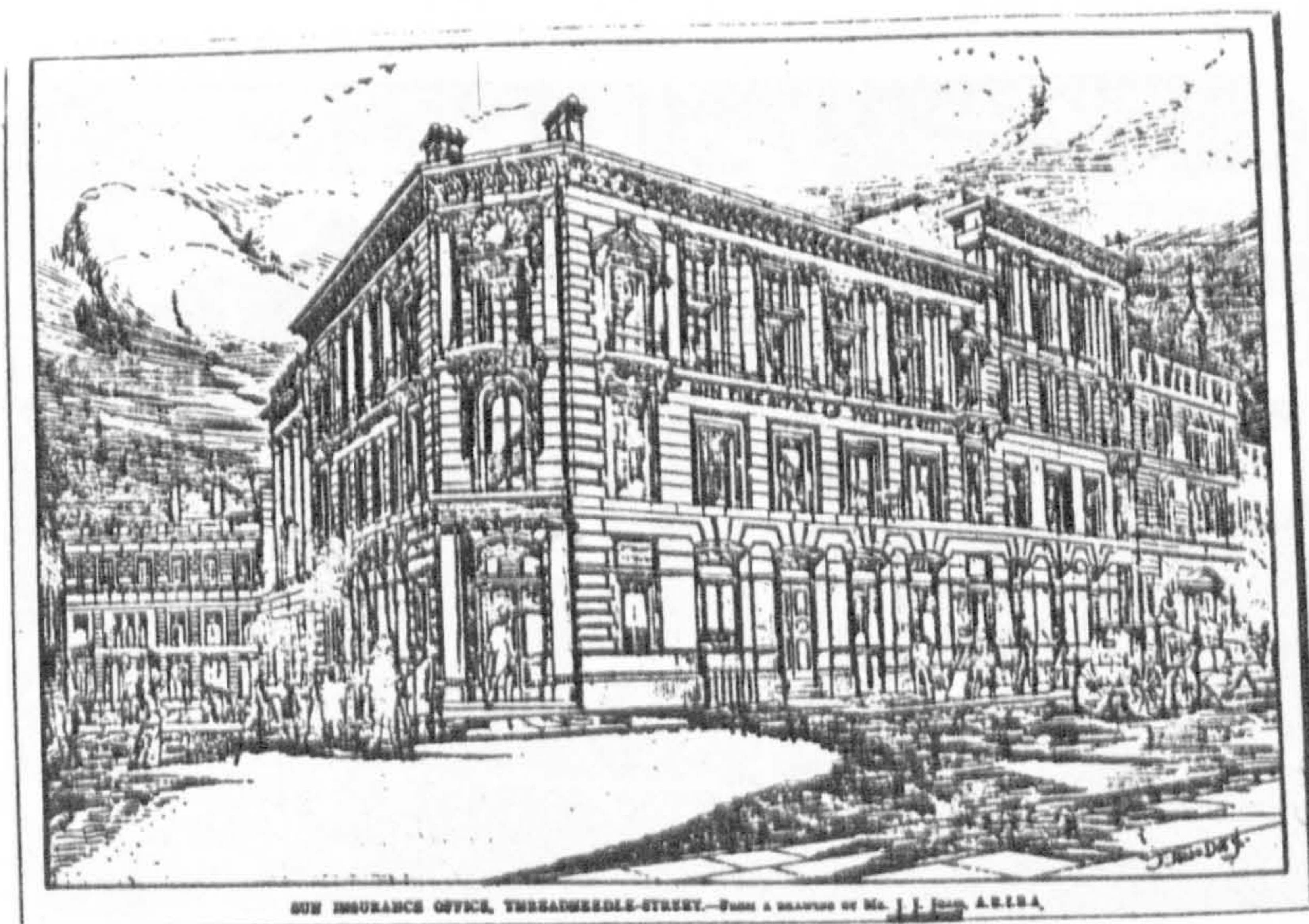
5-7

BRITISH LINEN BANK, Edinburgh, 1846
LONDON AND WESTMINSTER BANK, 1838

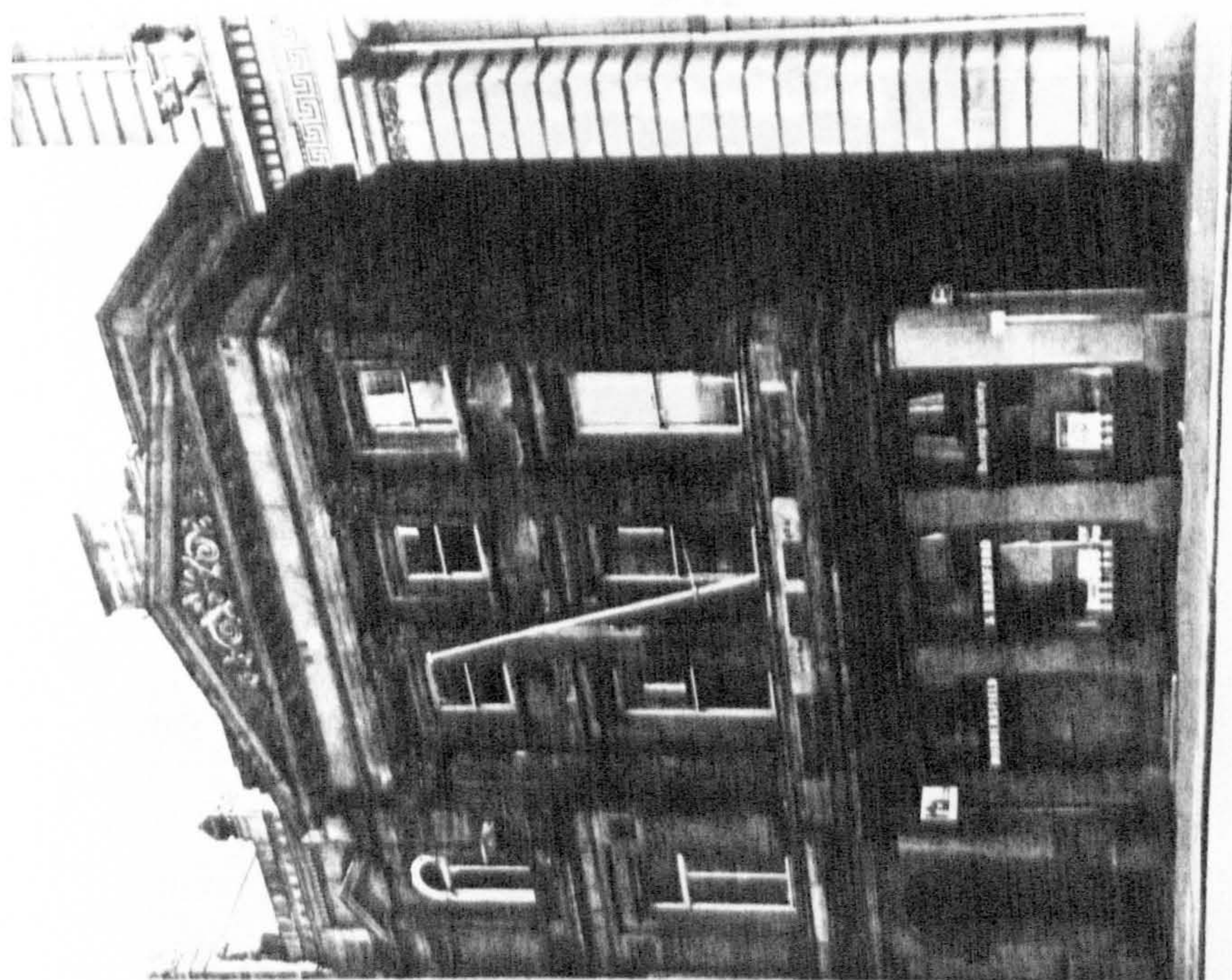
5-8

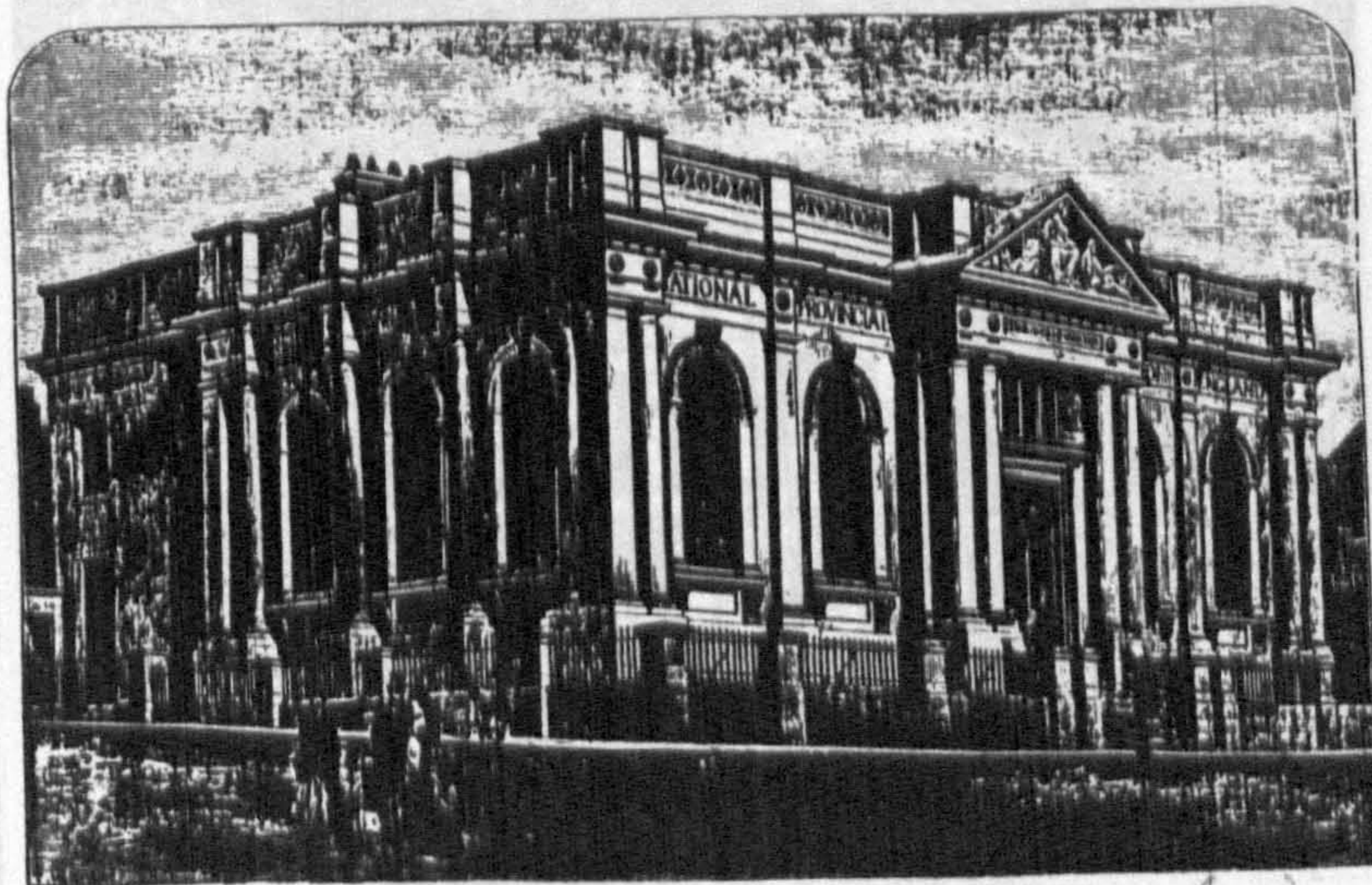


London and Westminster Bank, London. 1837. Design for entrance front.



5-9
 SUN INSURANCE OFFICE, City, 1843
 COMMERCIAL BANK, Liverpool, 1866
 5-10



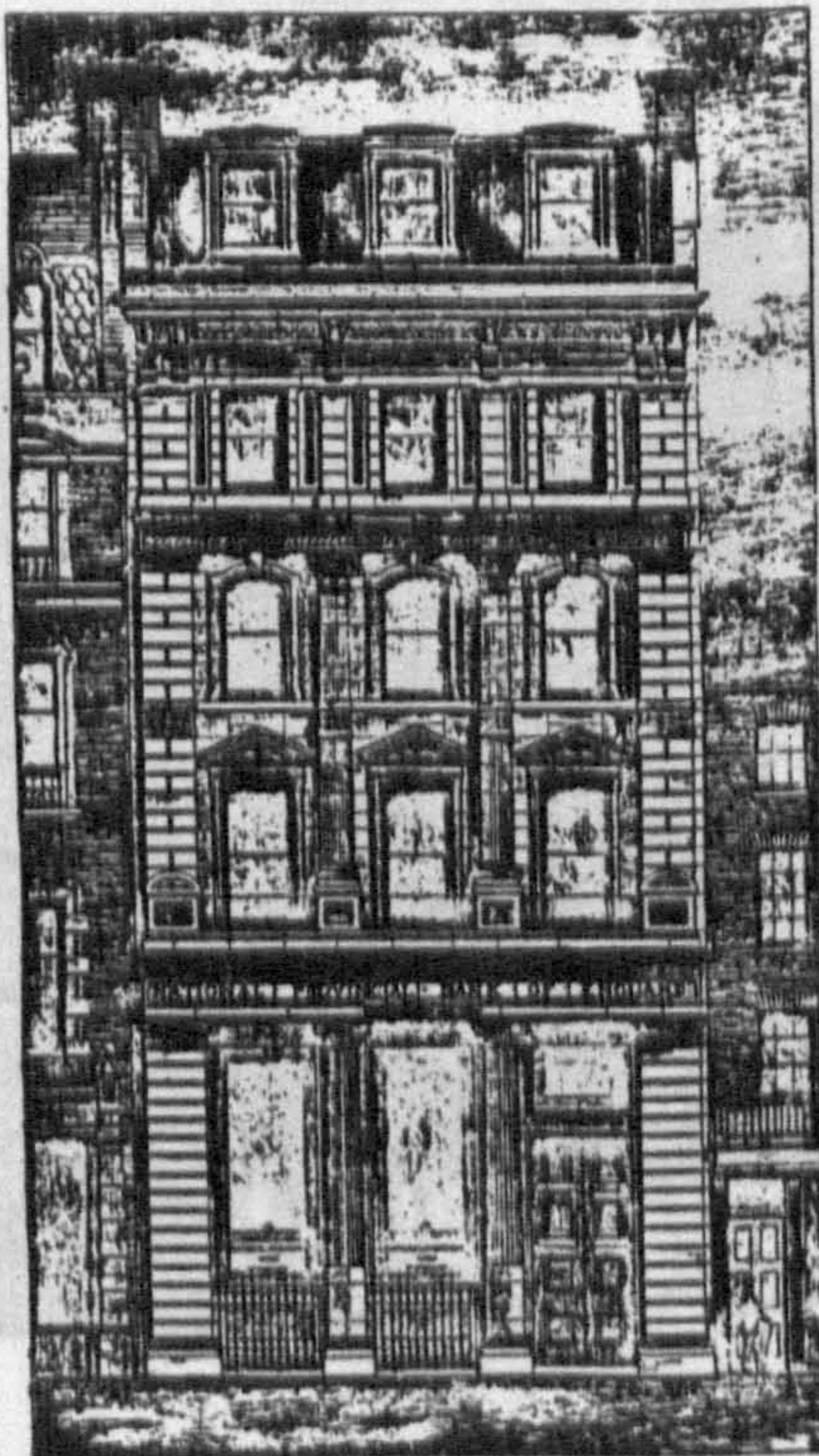


NATIONAL PROVINCIAL BANK OF ENGLAND, MIDDLESBROUGH.—MR. JOHN GUNN, ARCHT.

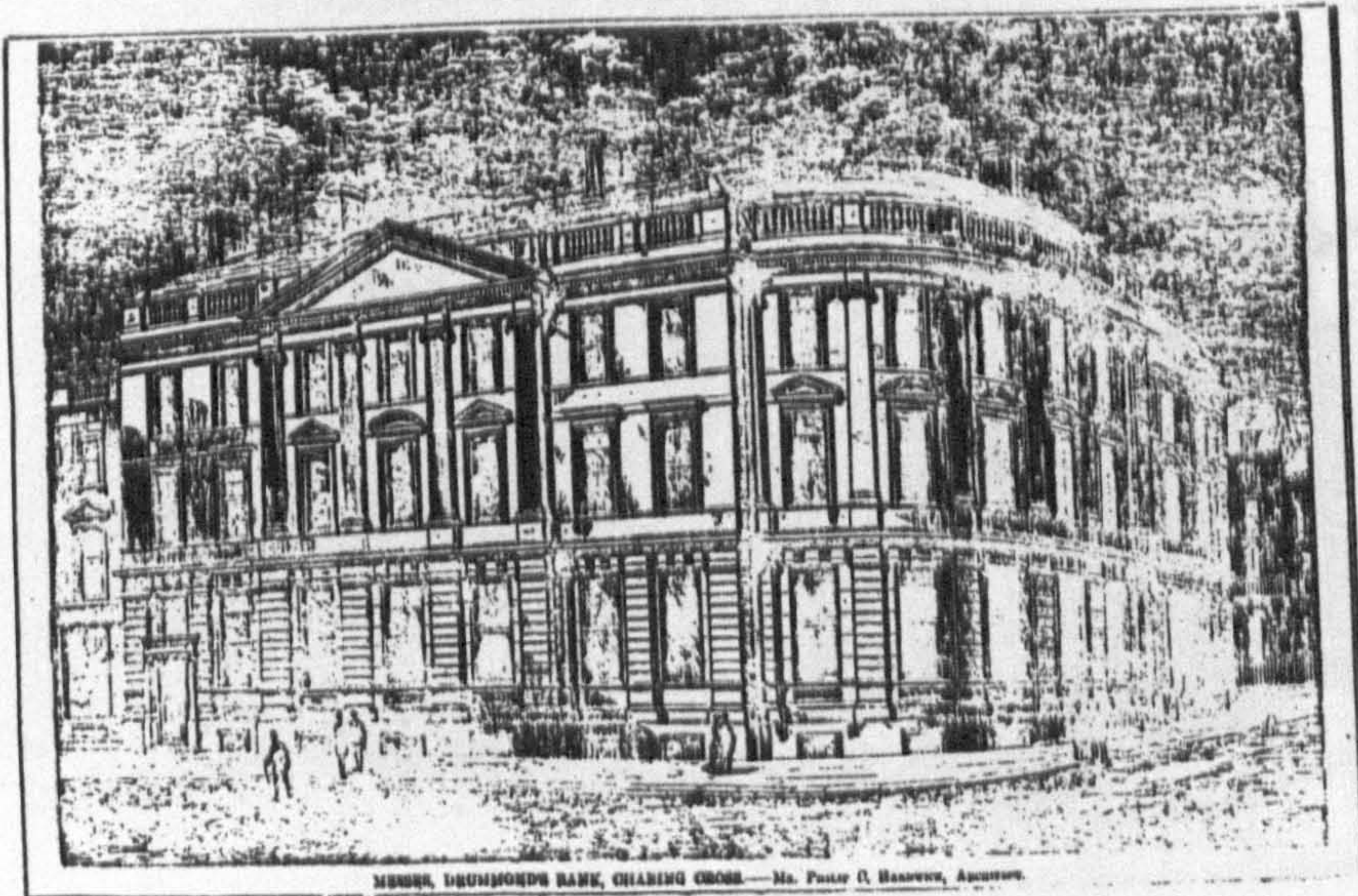
5-11

NATIONAL PROVINCIAL BANK, Middlesbrough, 1874
NATIONAL PROVINCIAL BANK, Westminster, 1873

5-12



NATIONAL PROVINCIAL BANK OF ENGLAND: ST. JAMES'S BRANCH, PICCADILLY.
MR. JOHN GUNN, ARCHT.

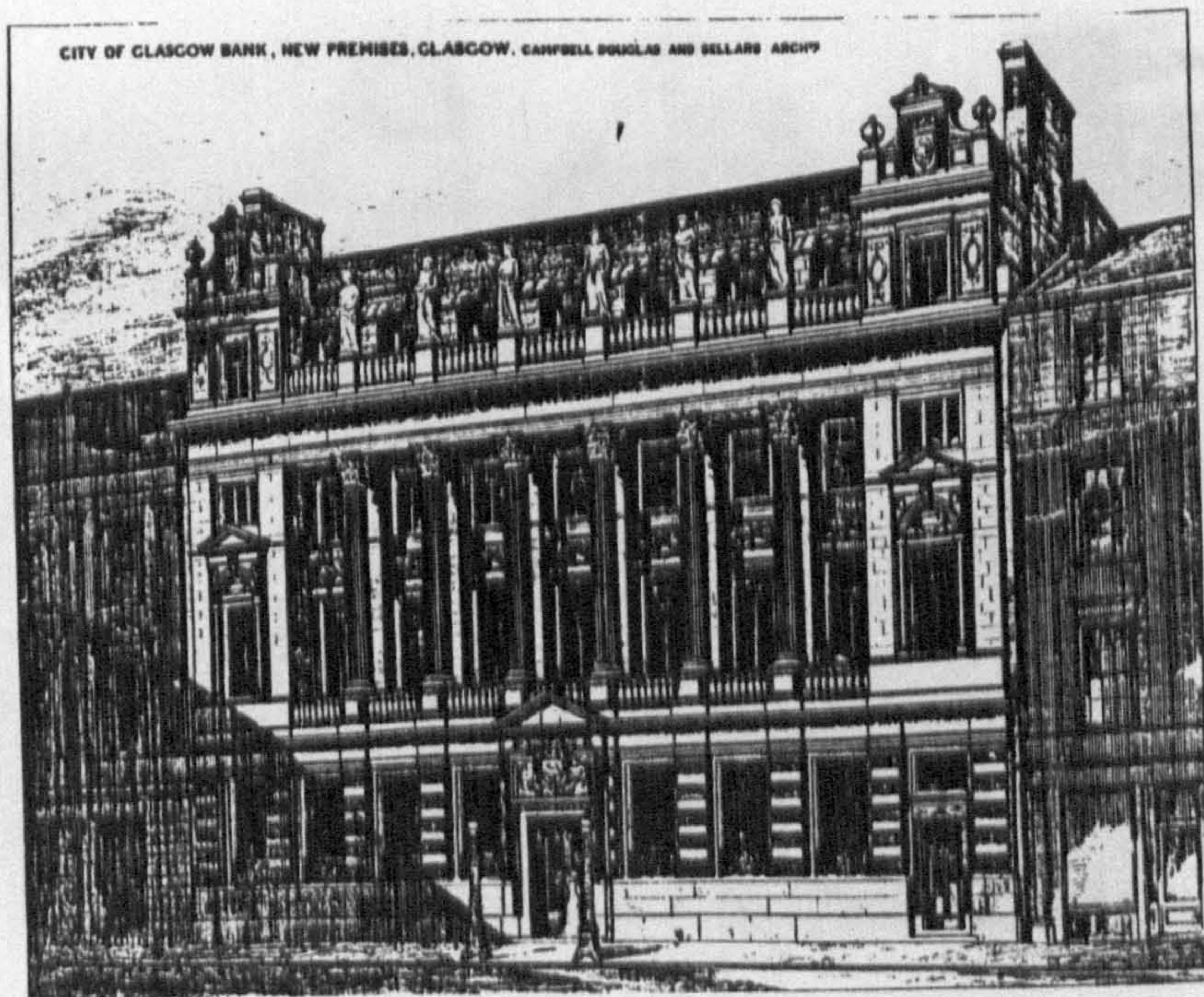


DRUMMONDS BANK, CHARING CROSS.—MR. PHILIP G. HARDWICK, ARCHT.

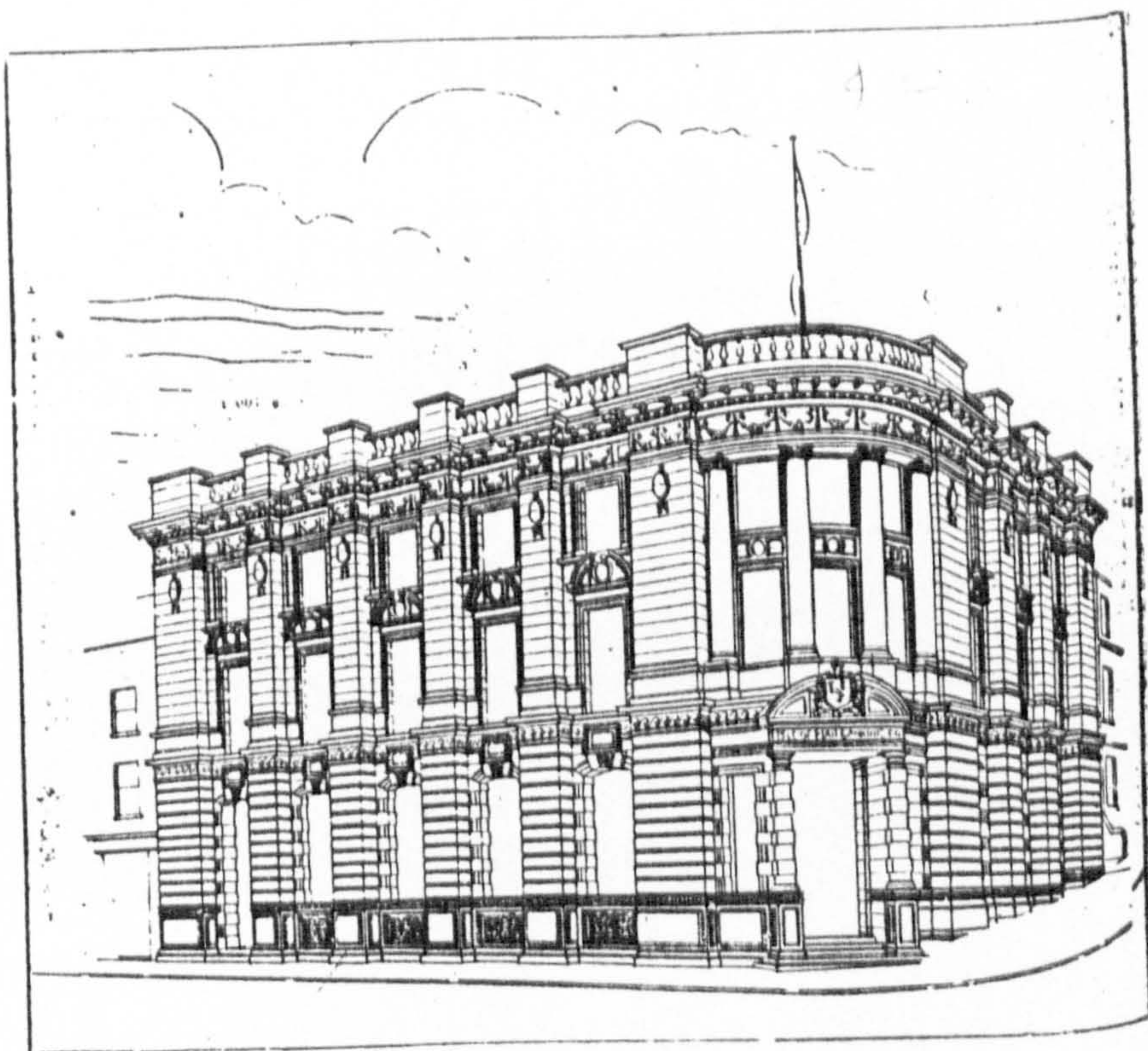
5-13

DRUMMONDS BANK, Westminster, 1879
CITY OF GLASGOW BANK, Glasgow, 1879

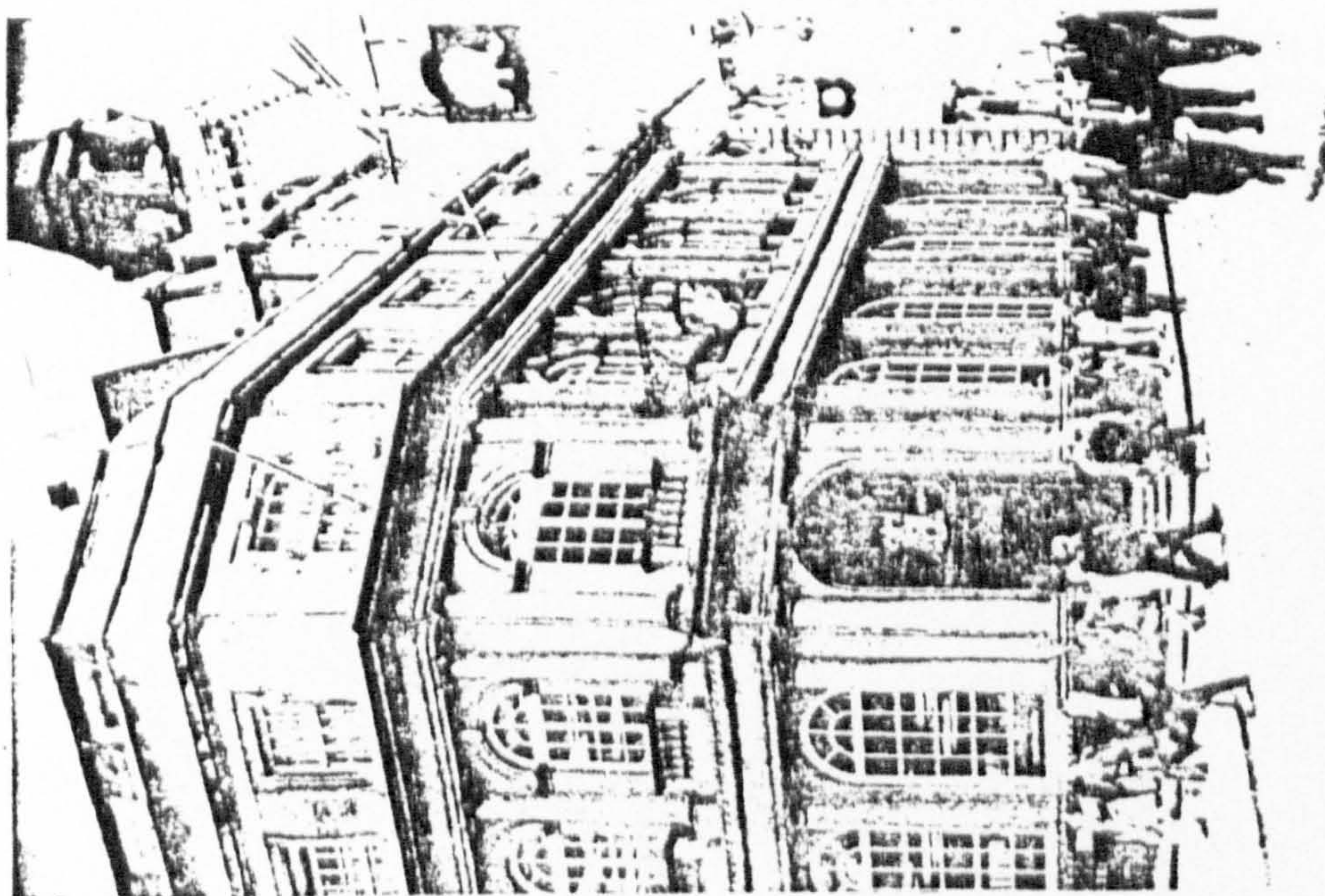
5-14

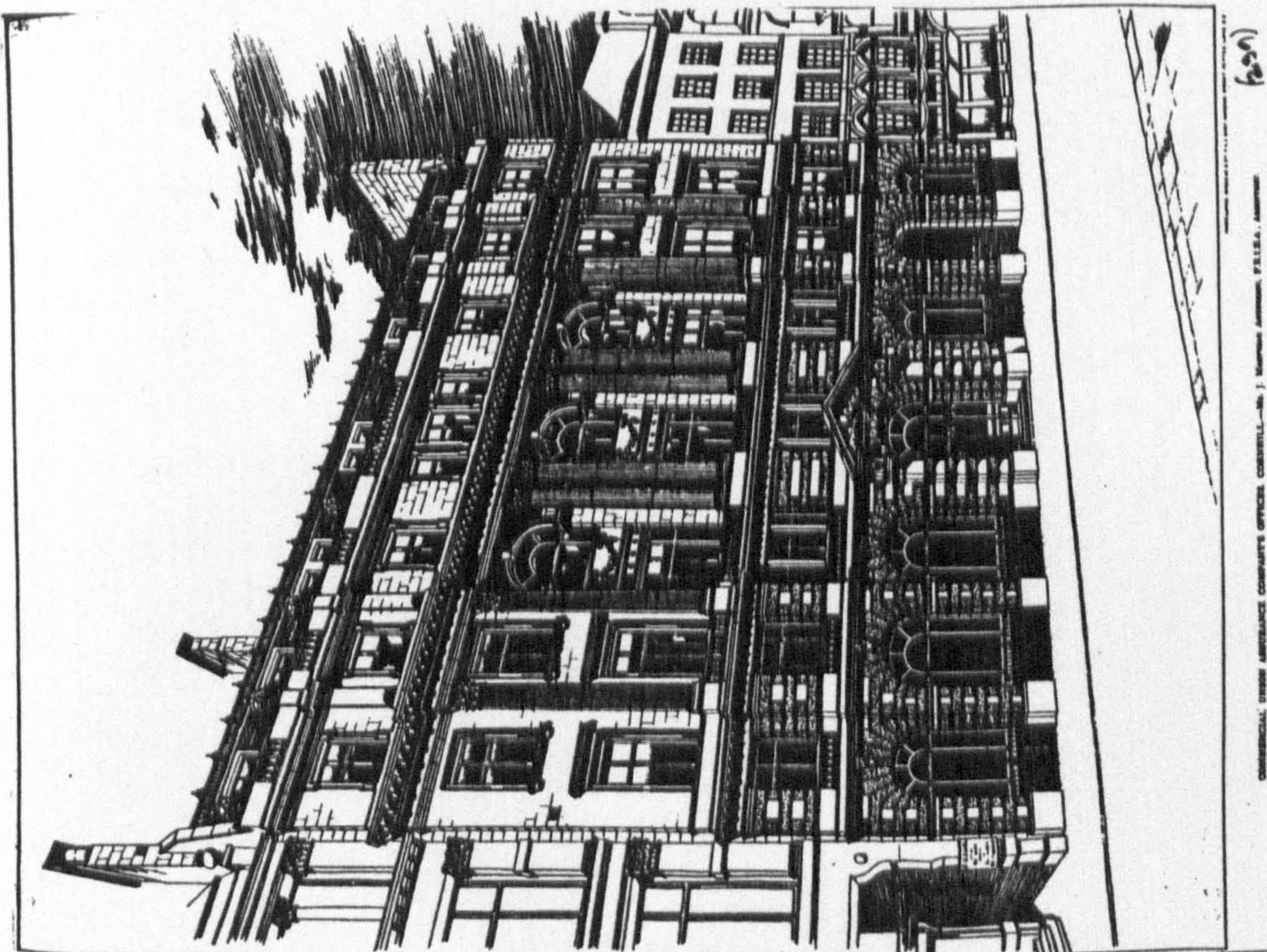


CITY OF GLASGOW BANK, NEW PREMISES, GLASGOW. CAMPBELL DOUGLAS AND SELLARS ARCHT.



5-15
 ISLE OF MAN BANKING CO., Douglas, 1899
 COMMERCIAL BANK OF SCOTLAND, City, 1889
 5-16

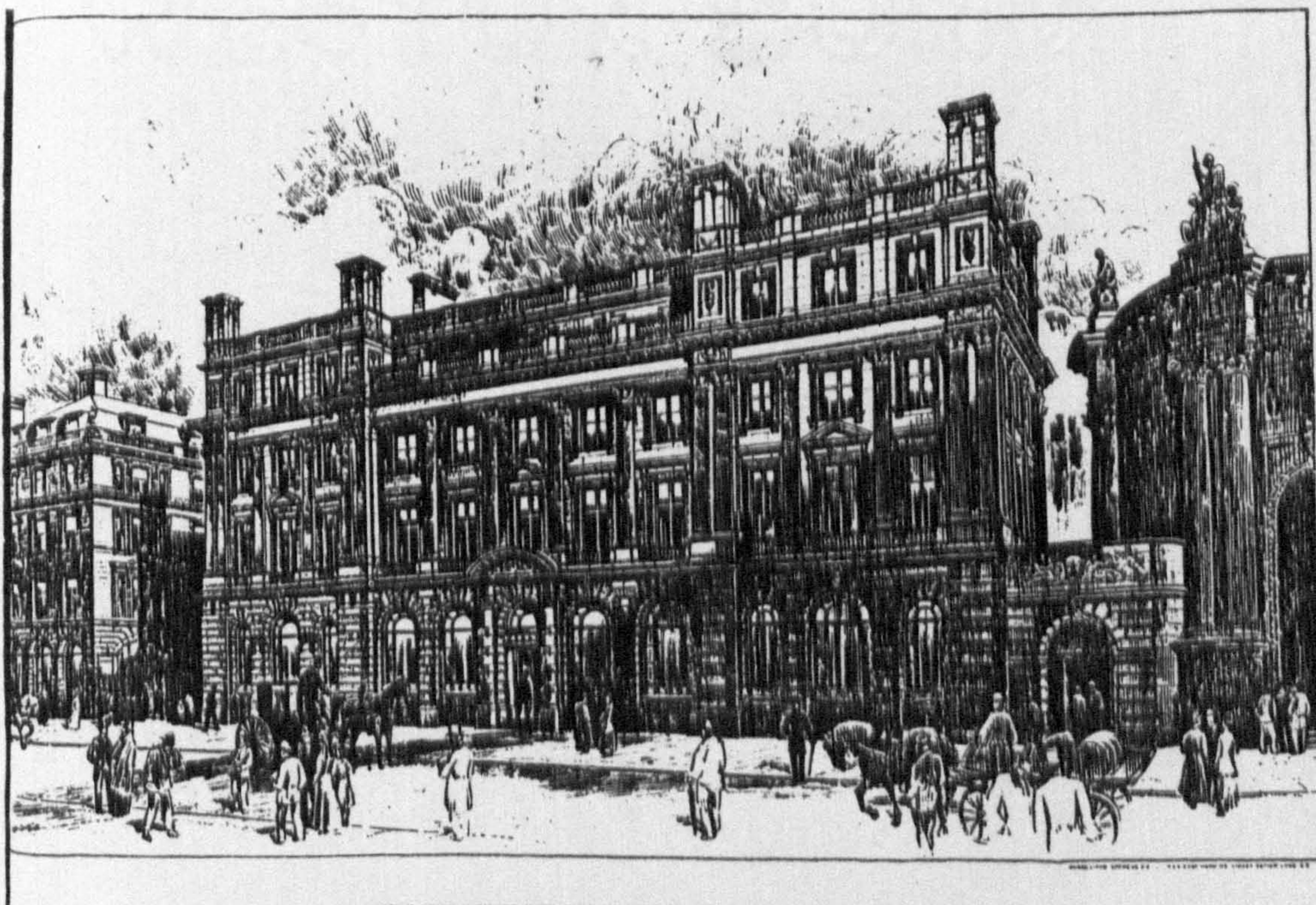




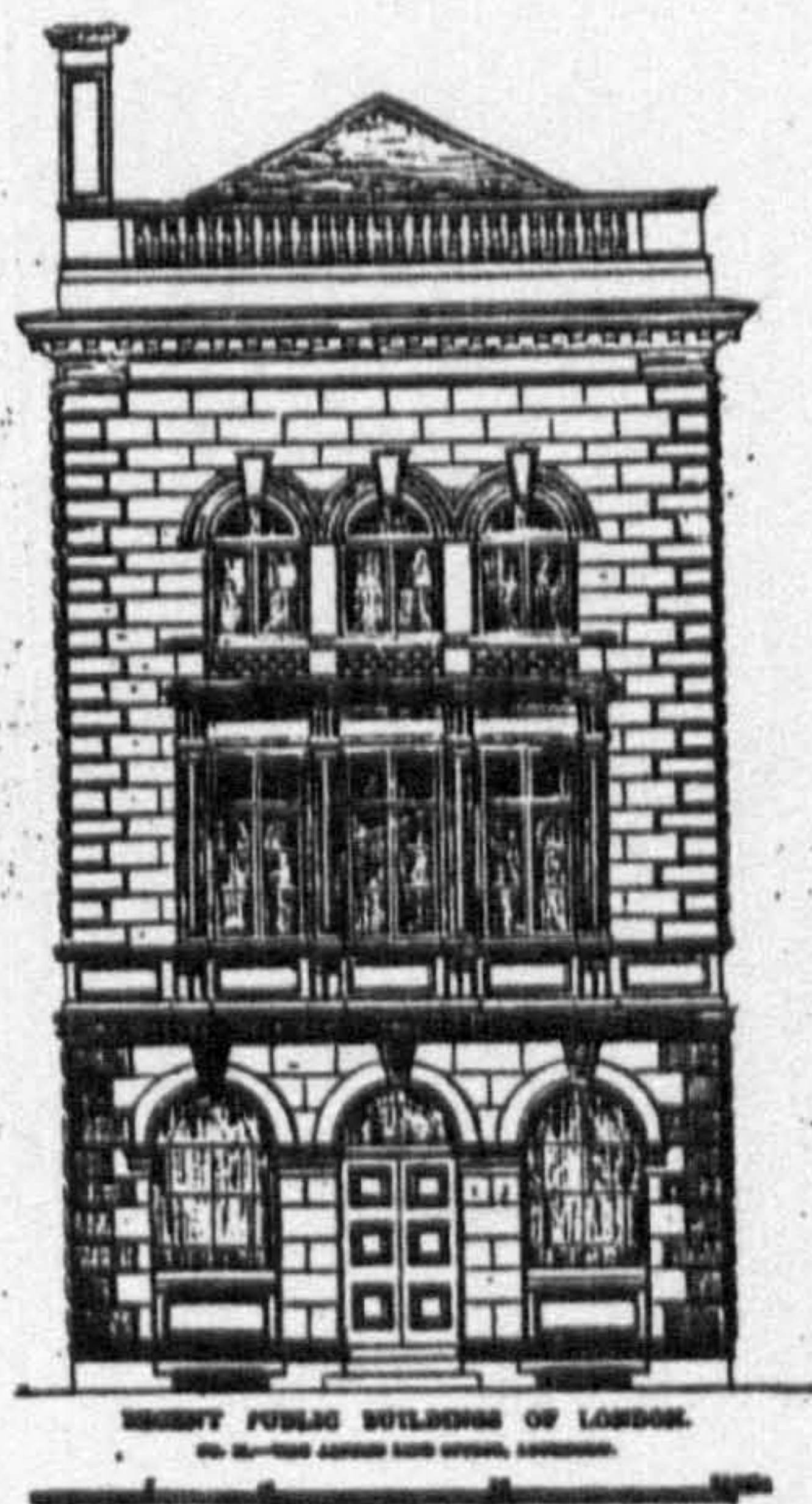
629

COMMERCIAL UNION ASSURANCE COMPANY'S OFFICE, CORNHILL—MR. J. MARSH & SONS, F.R.I.B.A., ARCHT.

5-17
 COMMERCIAL UNION ASSURANCE CO., City, 1896
 BRITISH LINEN COMPANY BANK, City, 1803
 5-18



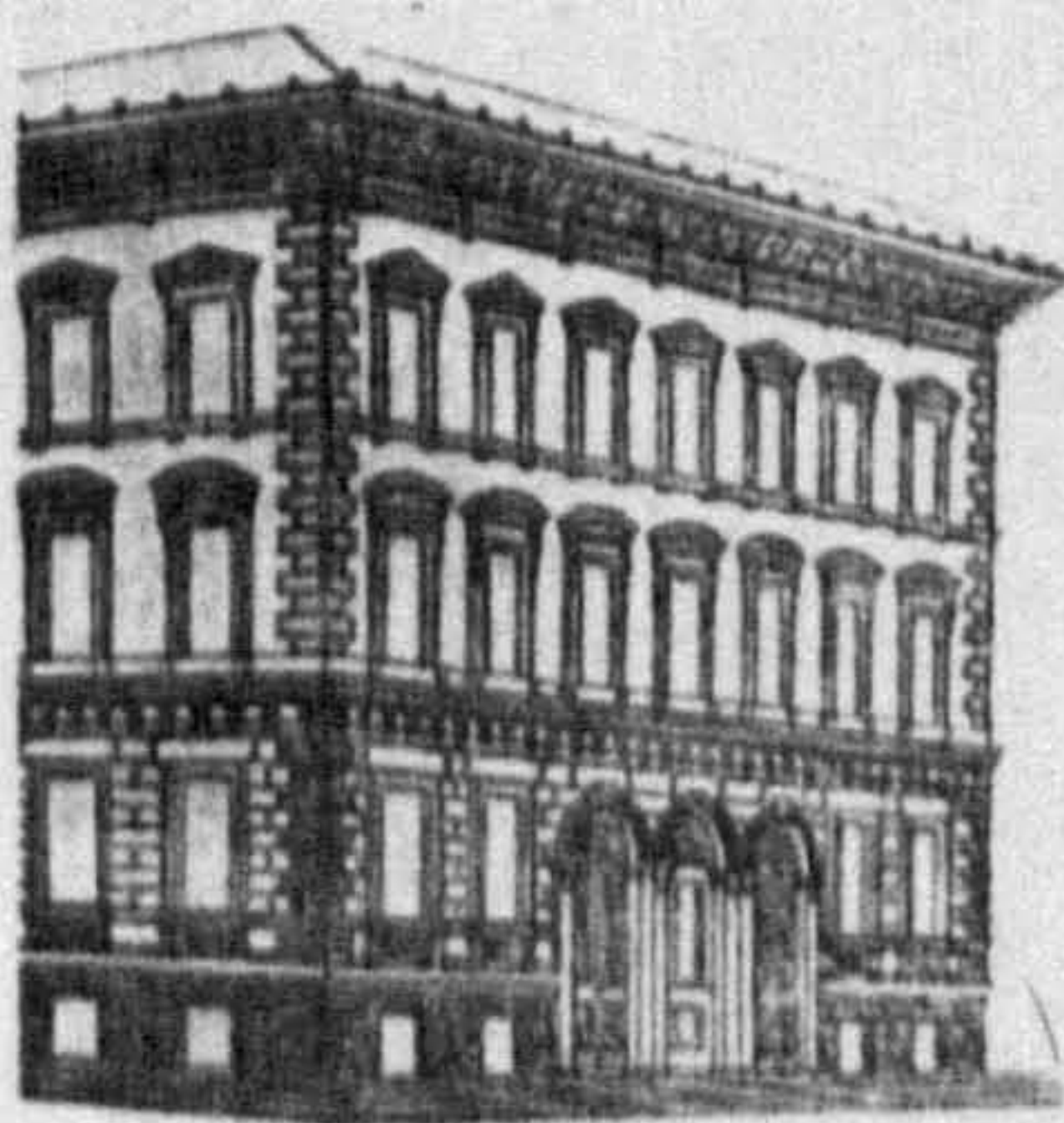
THE BRITISH LINEN COMPANY BANK, THREADNEEDLE STREET—MR. J. MARSH & SONS, F.R.I.B.A., ARCHT.

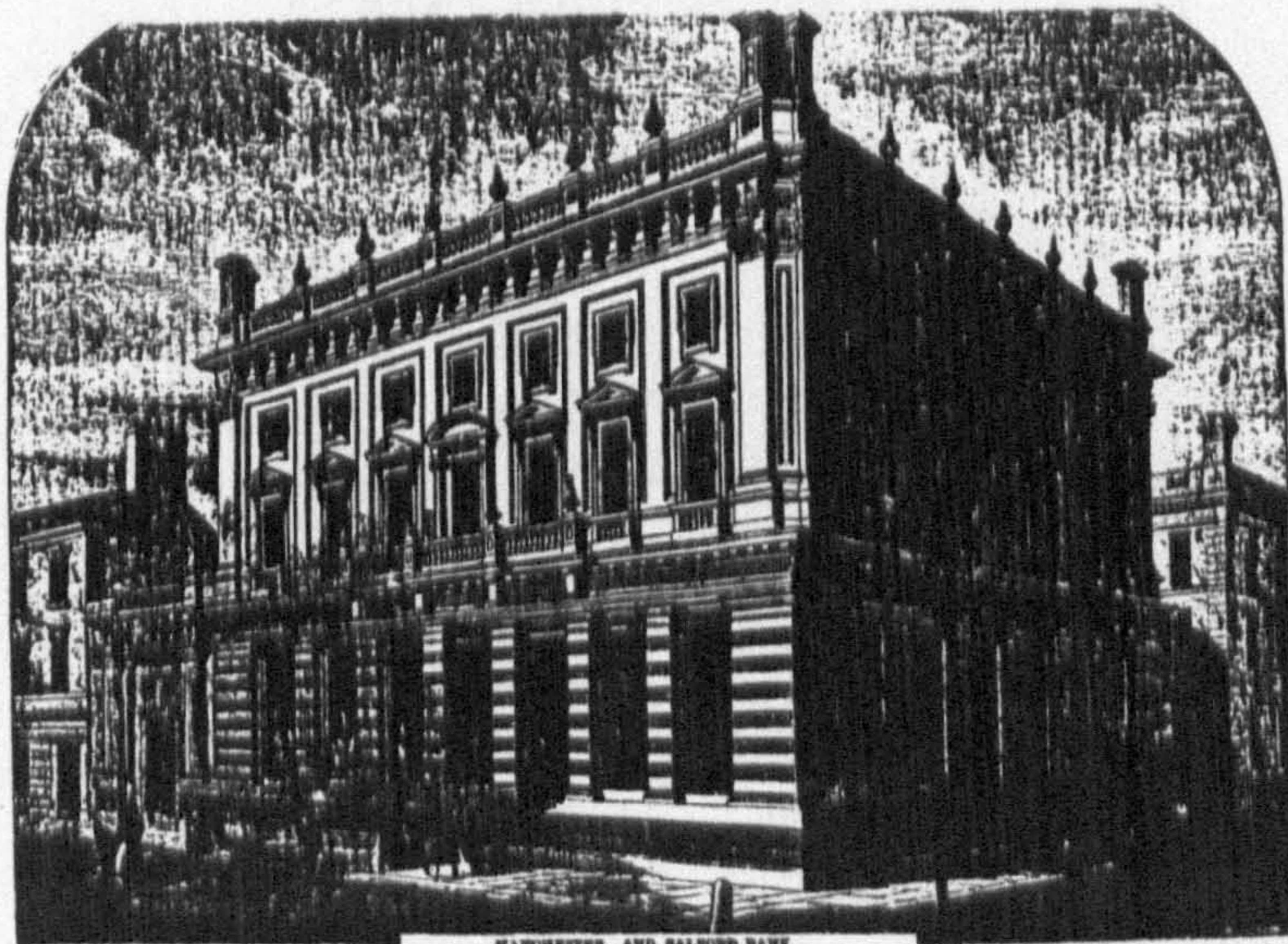


5-19

ALFRED LIFE OFFICE, City, 1843
BRUNSWICK BUILDING, Liverpool, 1843

5-20



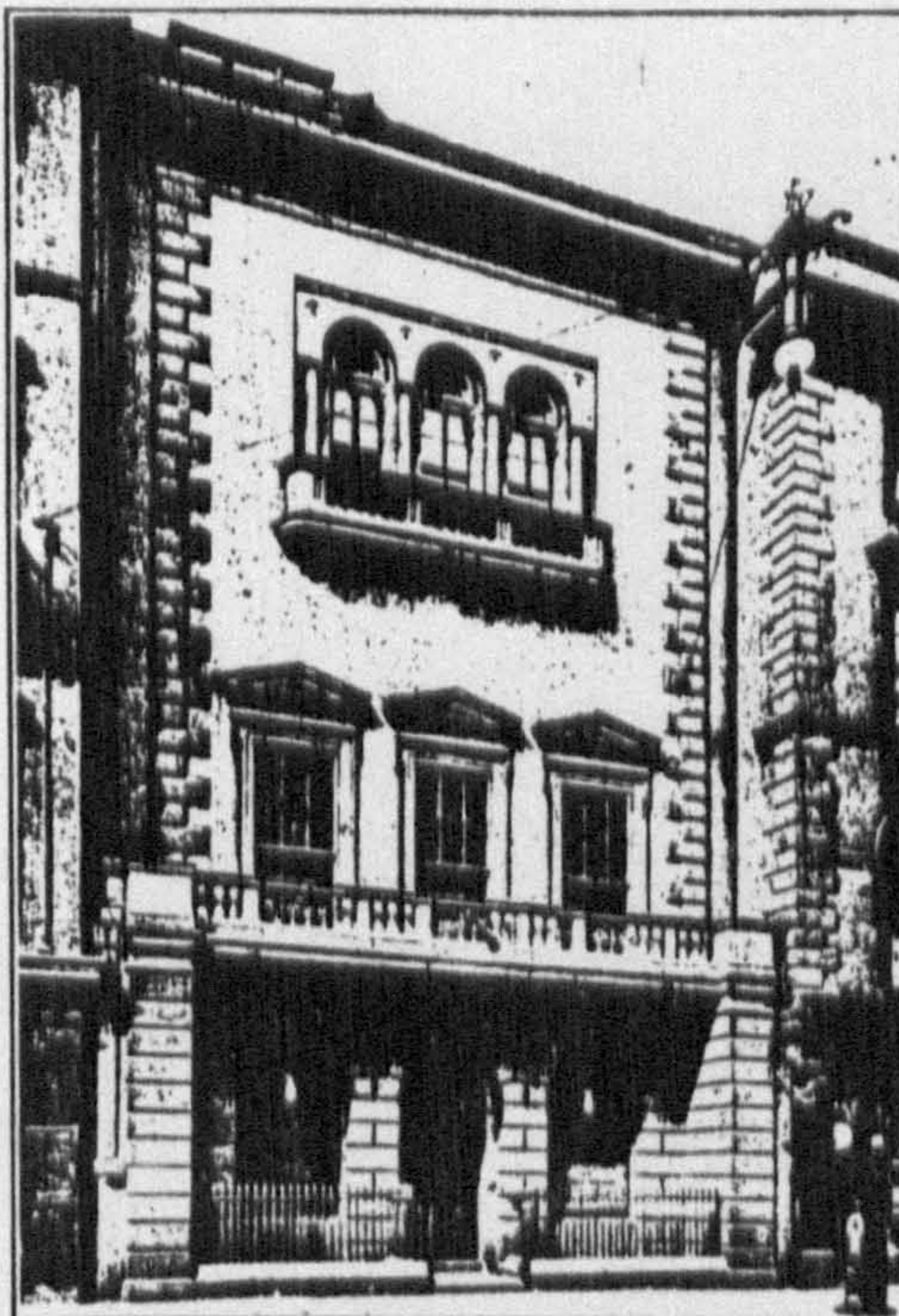


MANCHESTER AND SALFORD BANK.

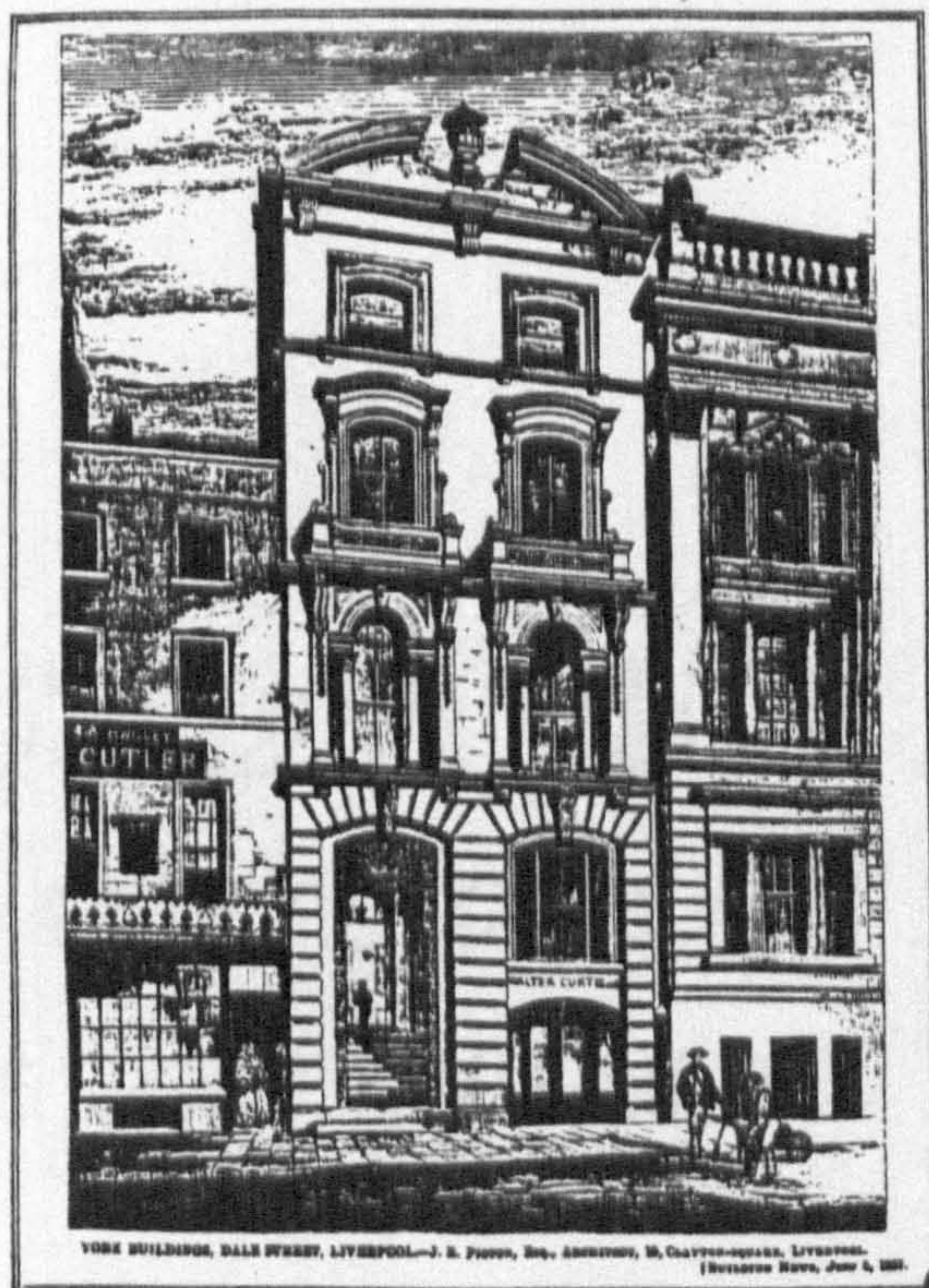
5-21

MANCHESTER AND SALFORD BANK, Manchester, 1862
MOORGATE STREET BUILDING, City, ca 1840

5-22



No. 61, Moorgate-Street, E.C.

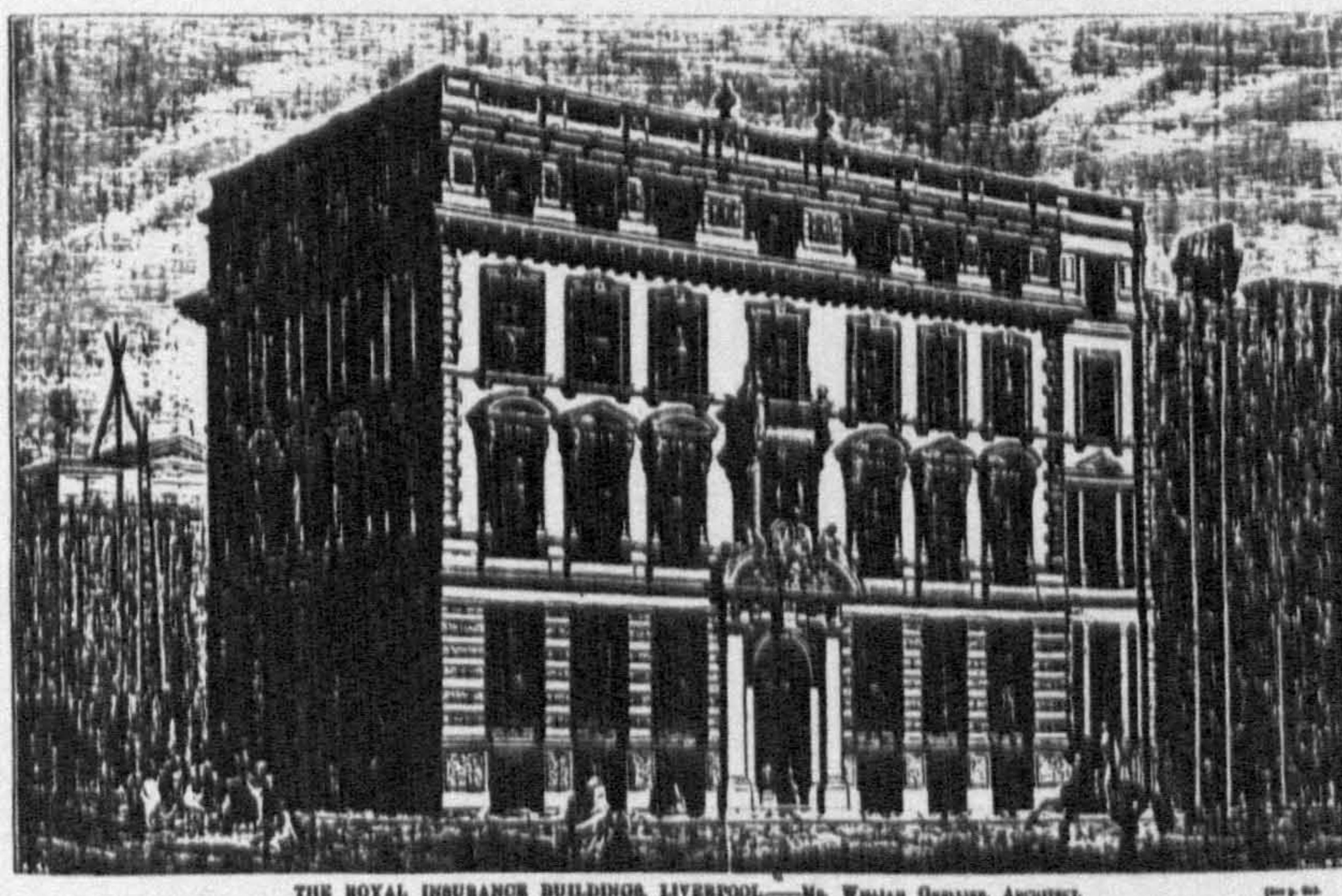


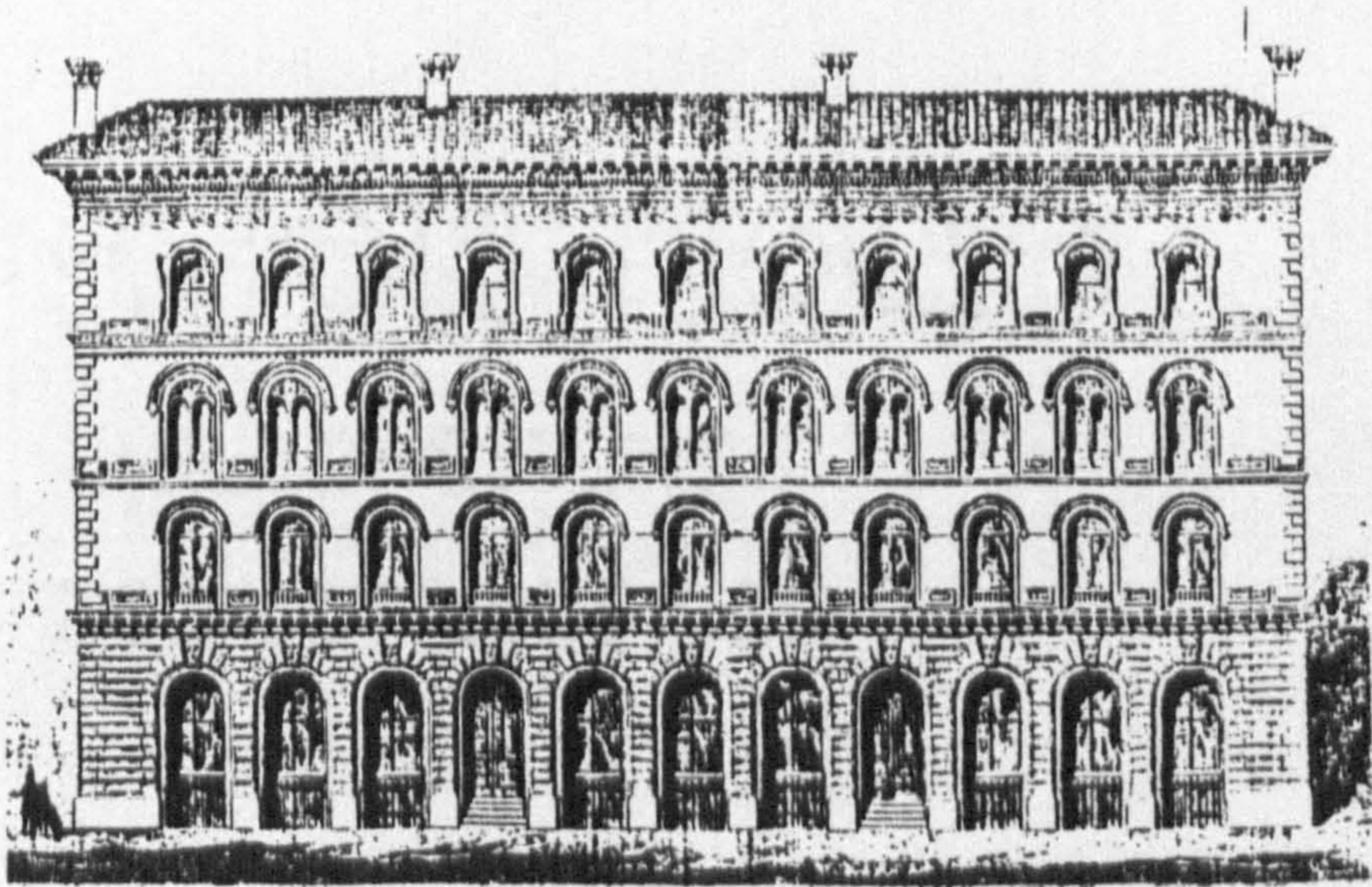
5-23

YORK BUILDINGS, Liverpool, 1857

ROYAL INSURANCE BUILDINGS, Liverpool, 1848

5-24





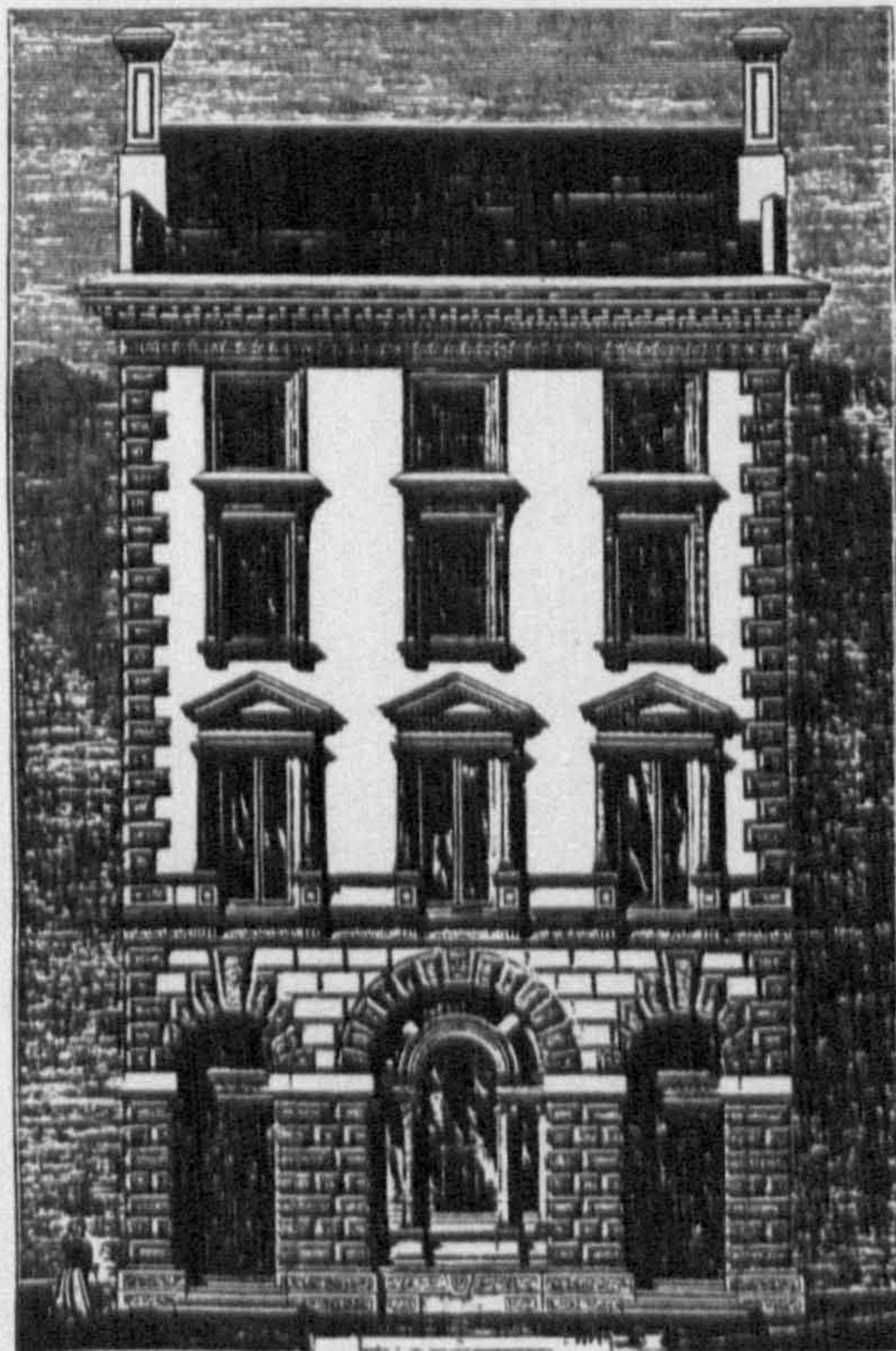
NEW BUILDING, CORNER OF CHANCERY-LANE, LONDON.—MR. KNORR, ARCHTCT.

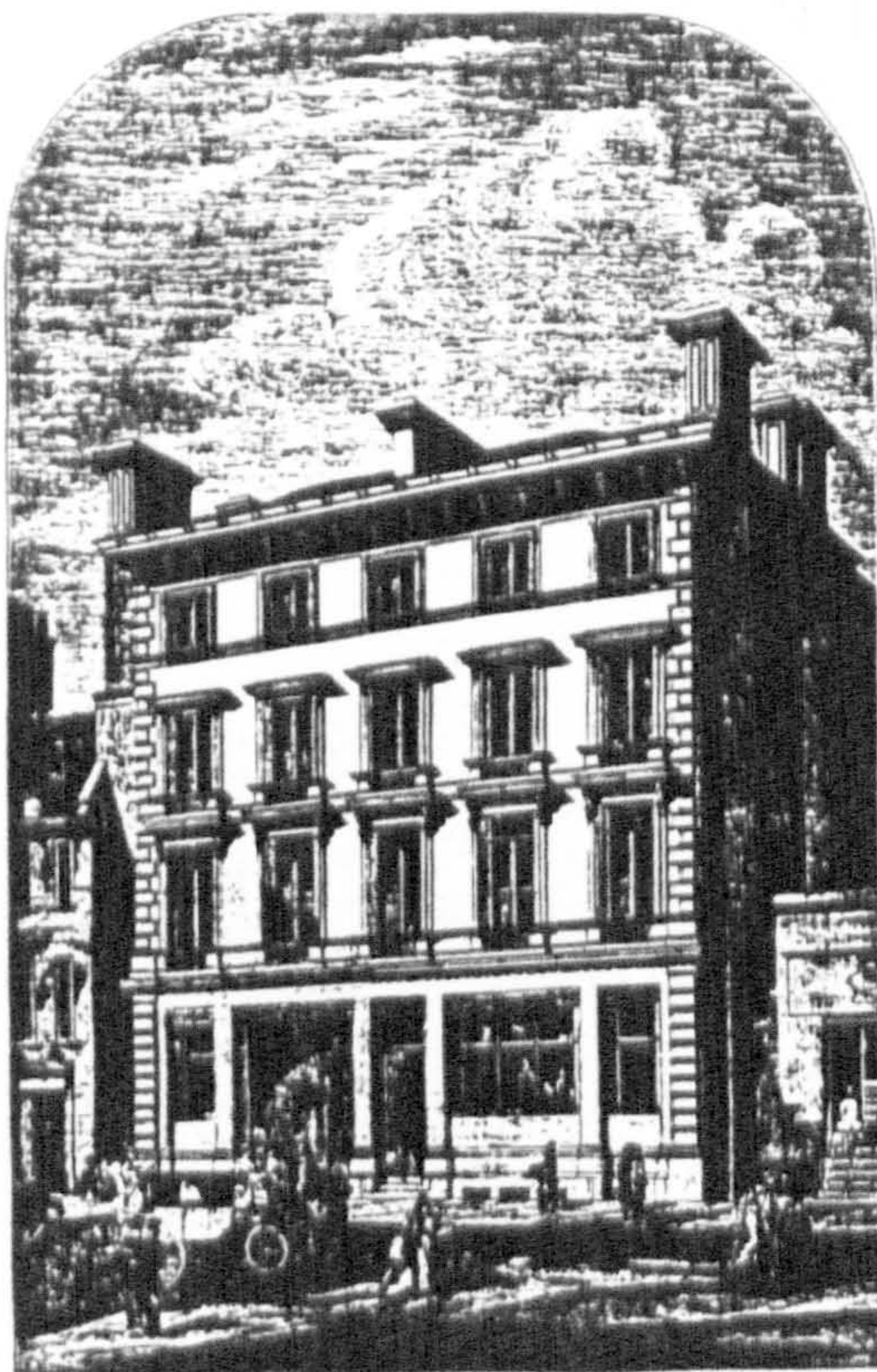
5-25

HODGESON'S BUILDINGS, City, 1855
BANK, Northampton, 1850

5-26

NEW BANK, NORTHAMPTON.
MR. H. P. LLOYD, ARCHTCT.



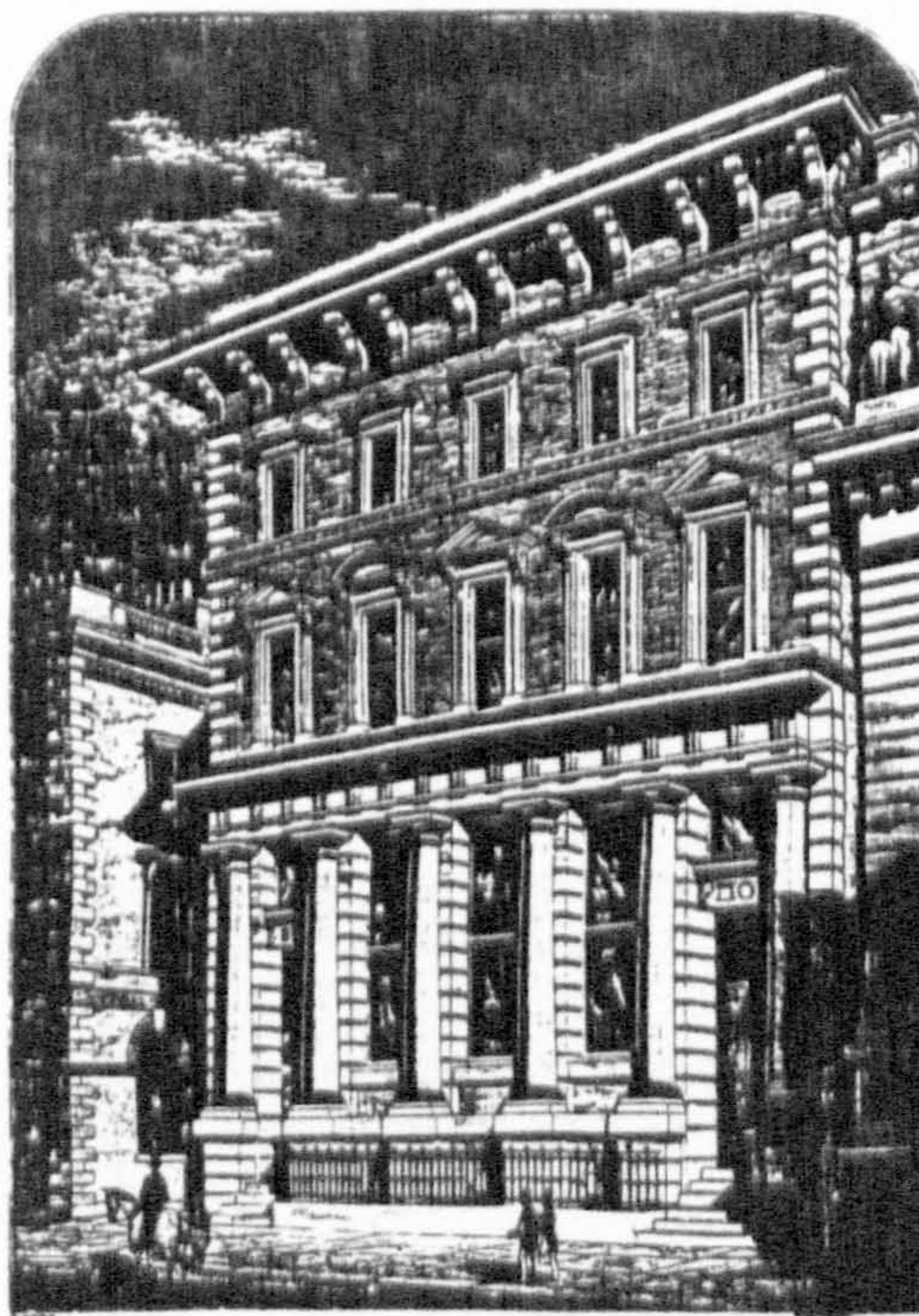


MESSRS. CAPEL AND CO.'S OFFICES, THROGMORTON STREET.—MR. J. J. CHAS. ANDERSON.

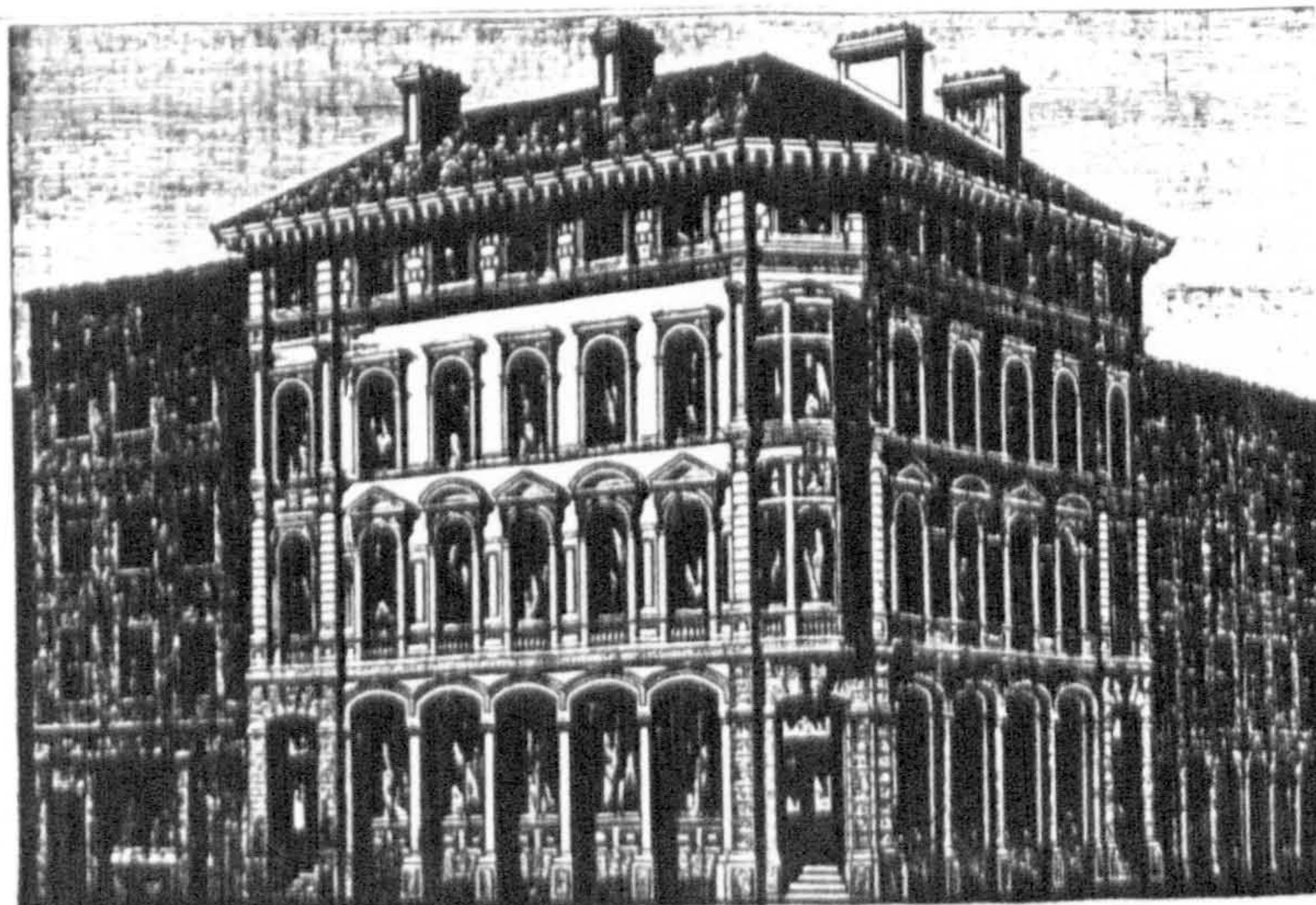
5-27

CAPEL AND CO., City, 1854
JONES LOYD AND CO., City, 1857

5-28



MESSRS. JONES LOYD AND CO.'S NEW BANK, LONDON.—MR. P. C. ANDERSON.

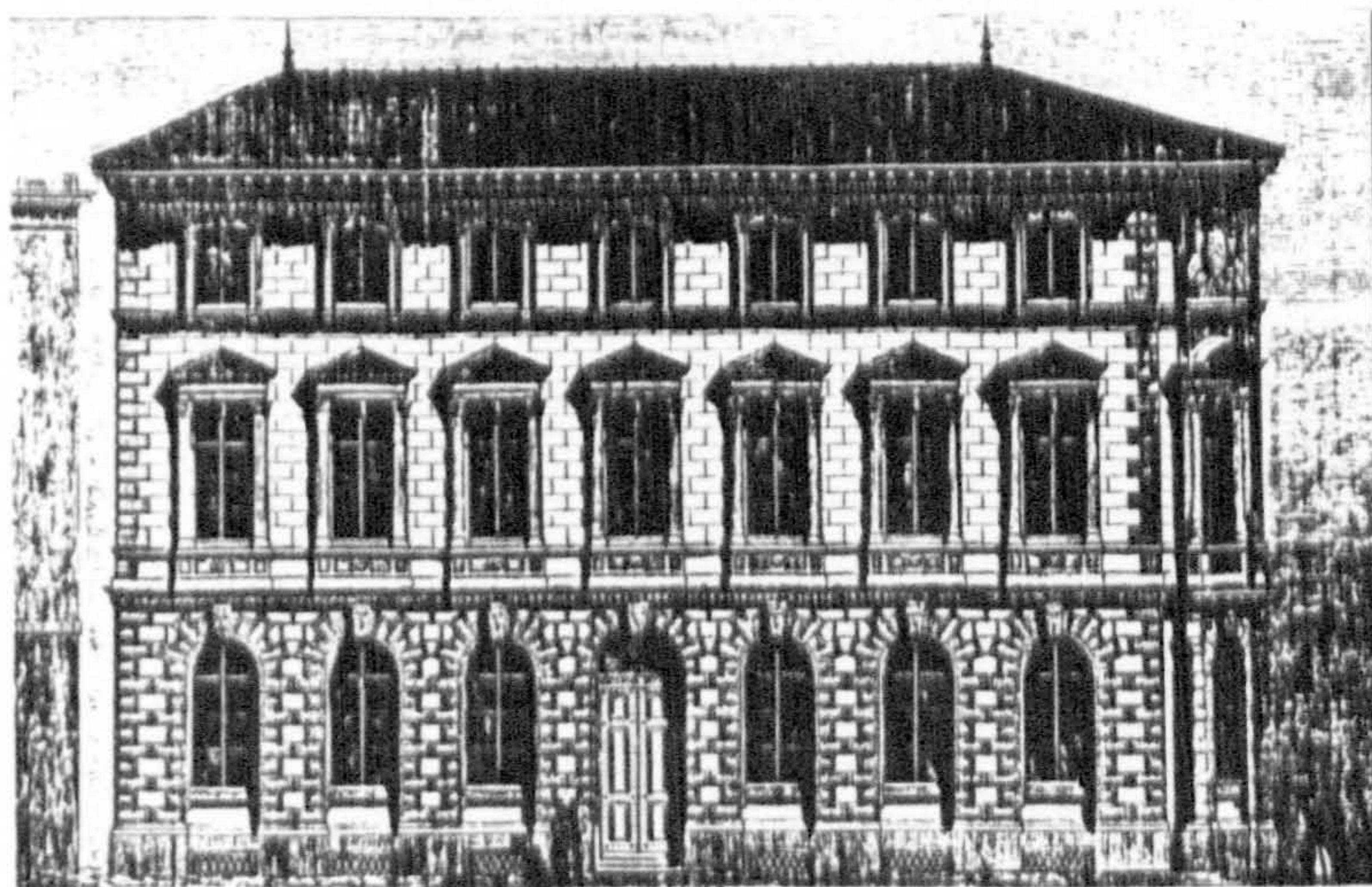


THE QUEEN'S ASSURANCE AND COMMERCIAL CHAMBERS, LONDON.—MR. STANLEY WOOD, ARCHT.

5-29

QUEENS ASSURANCE AND COMMERCIAL CHAMBERS, City, 1848
IMPERIAL INSURANCE OFFICE, City, 1848

5-30



NEW IMPERIAL INSURANCE-OFFICE, THREADNEEDLE-STREET.—MR. GUNN, ARCHT.

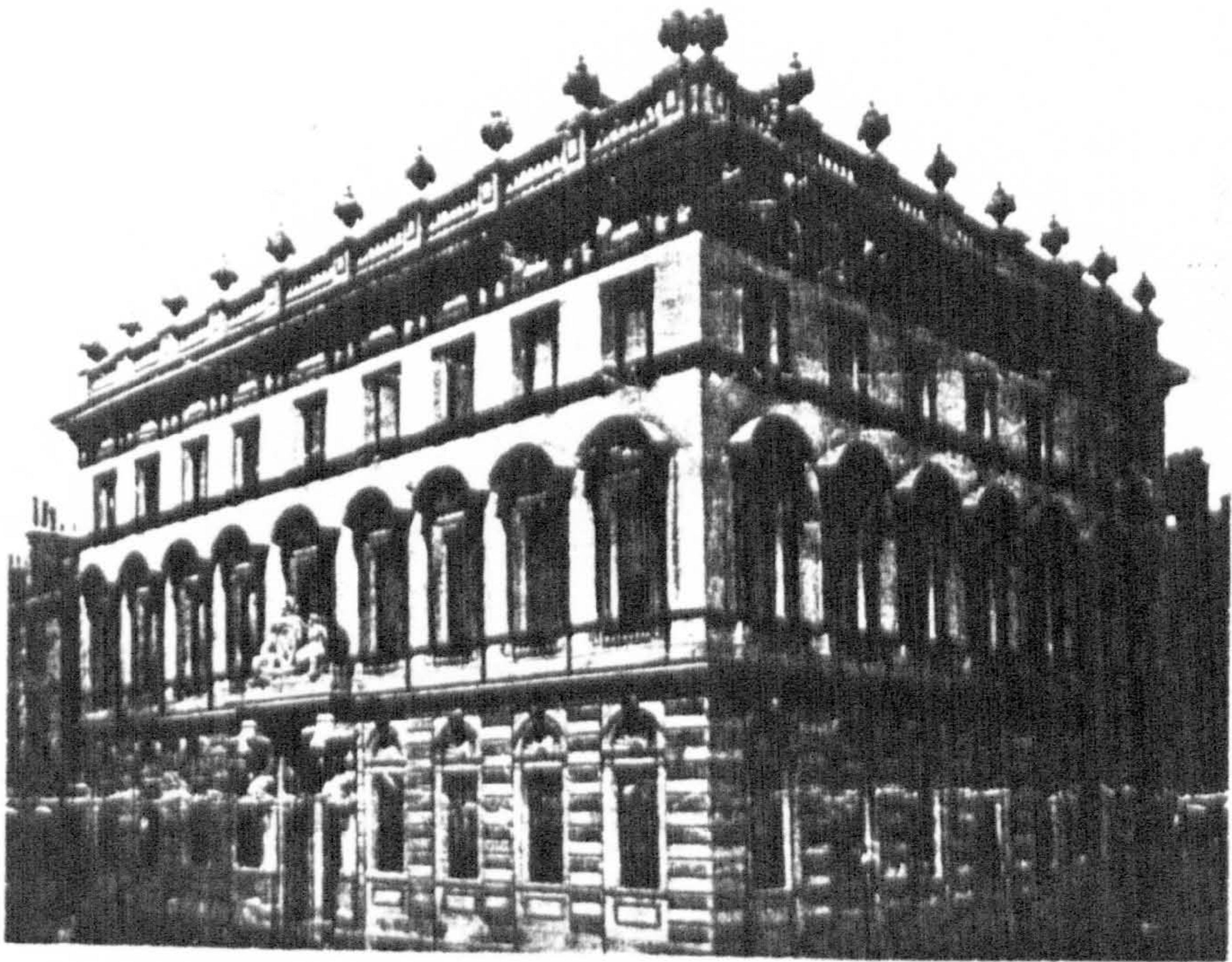


5-31

LONDON AND WESTMINSTER BANK, Westminster, 1853
BANK OF SCOTLAND, Edinburgh, 1883

5-32

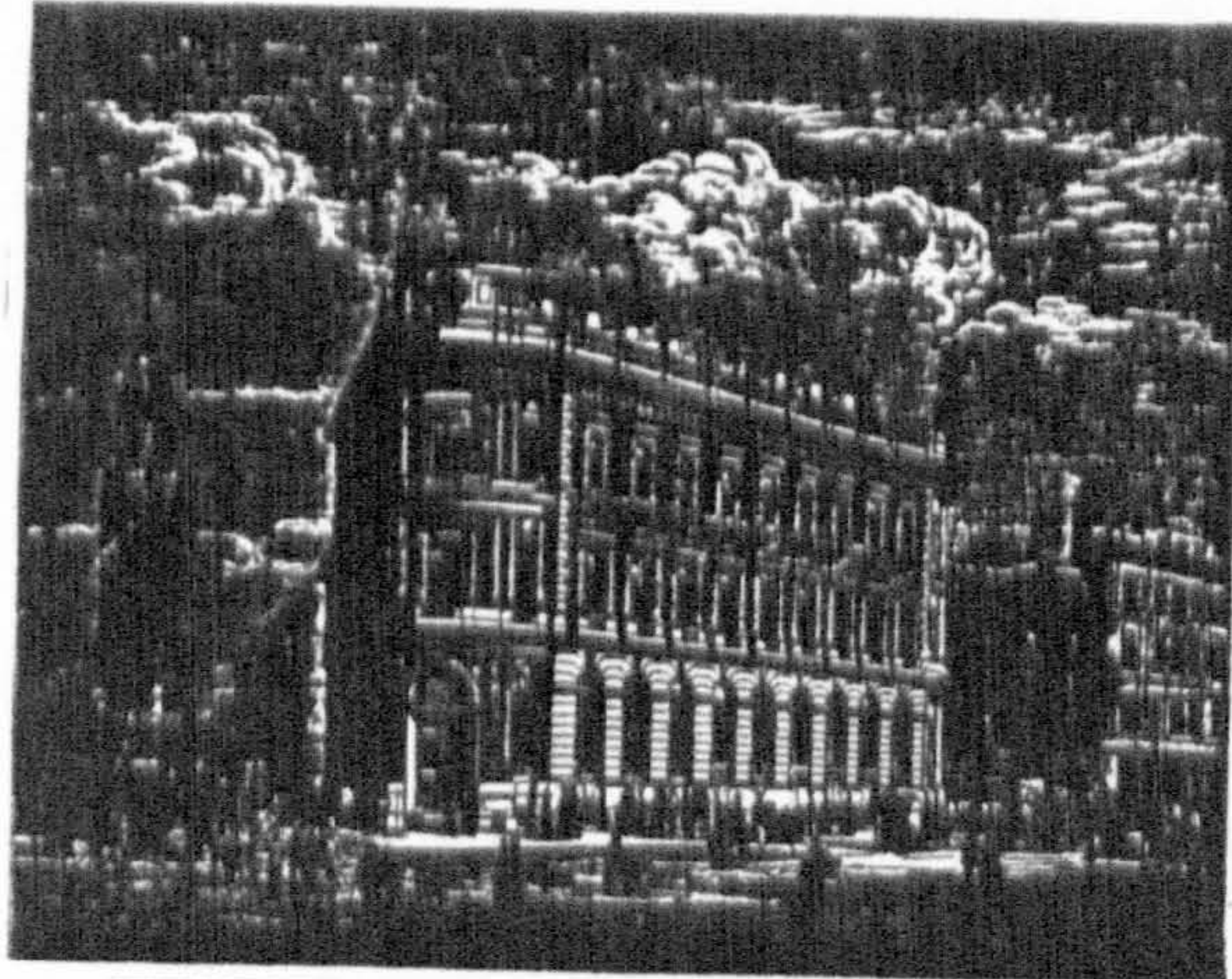




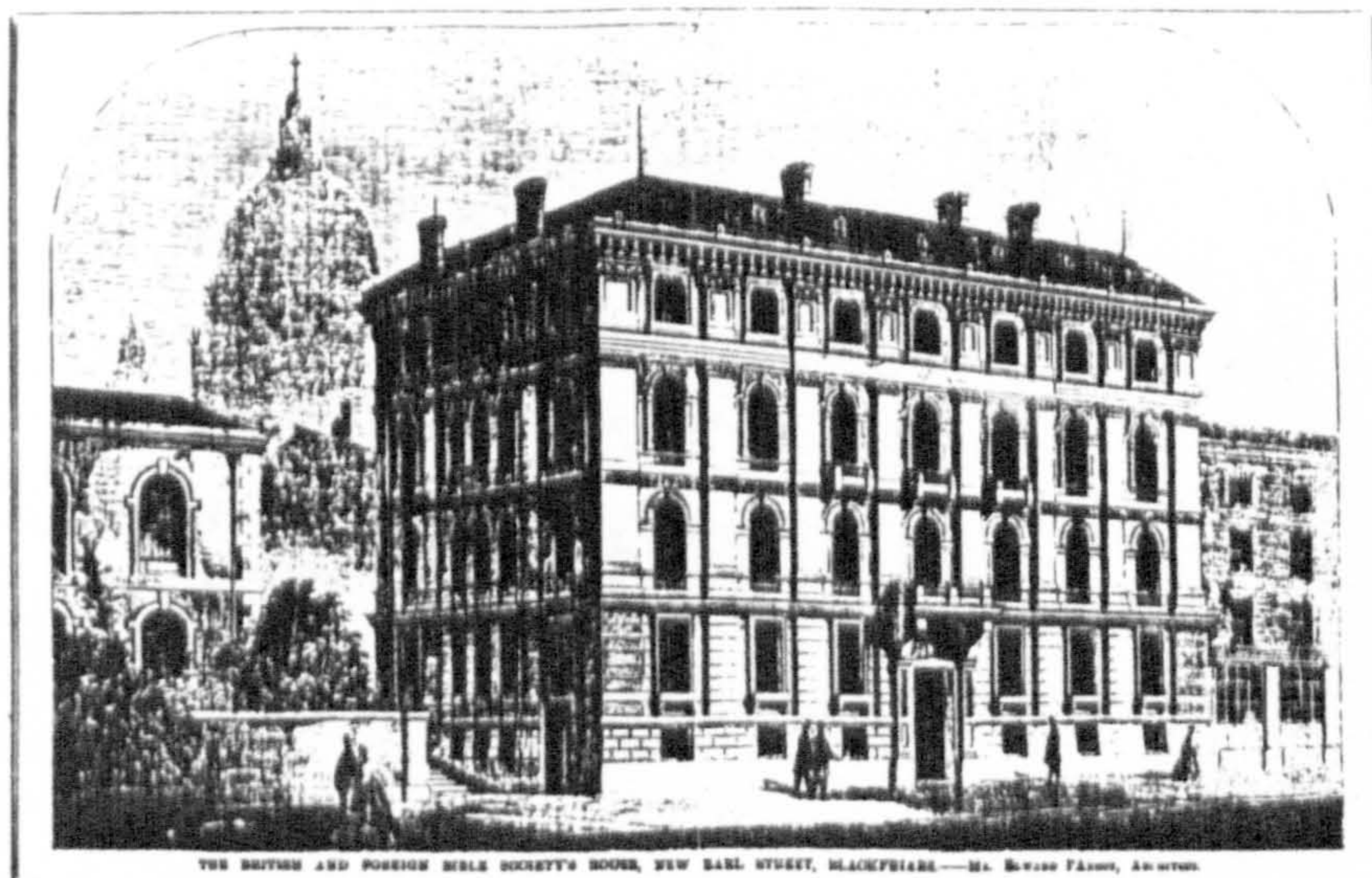
5-33

BANK OF SCOTLAND, Glasgow, 1869
NATIONAL SAFE DEPOSIT CO., City, 1873

5-34



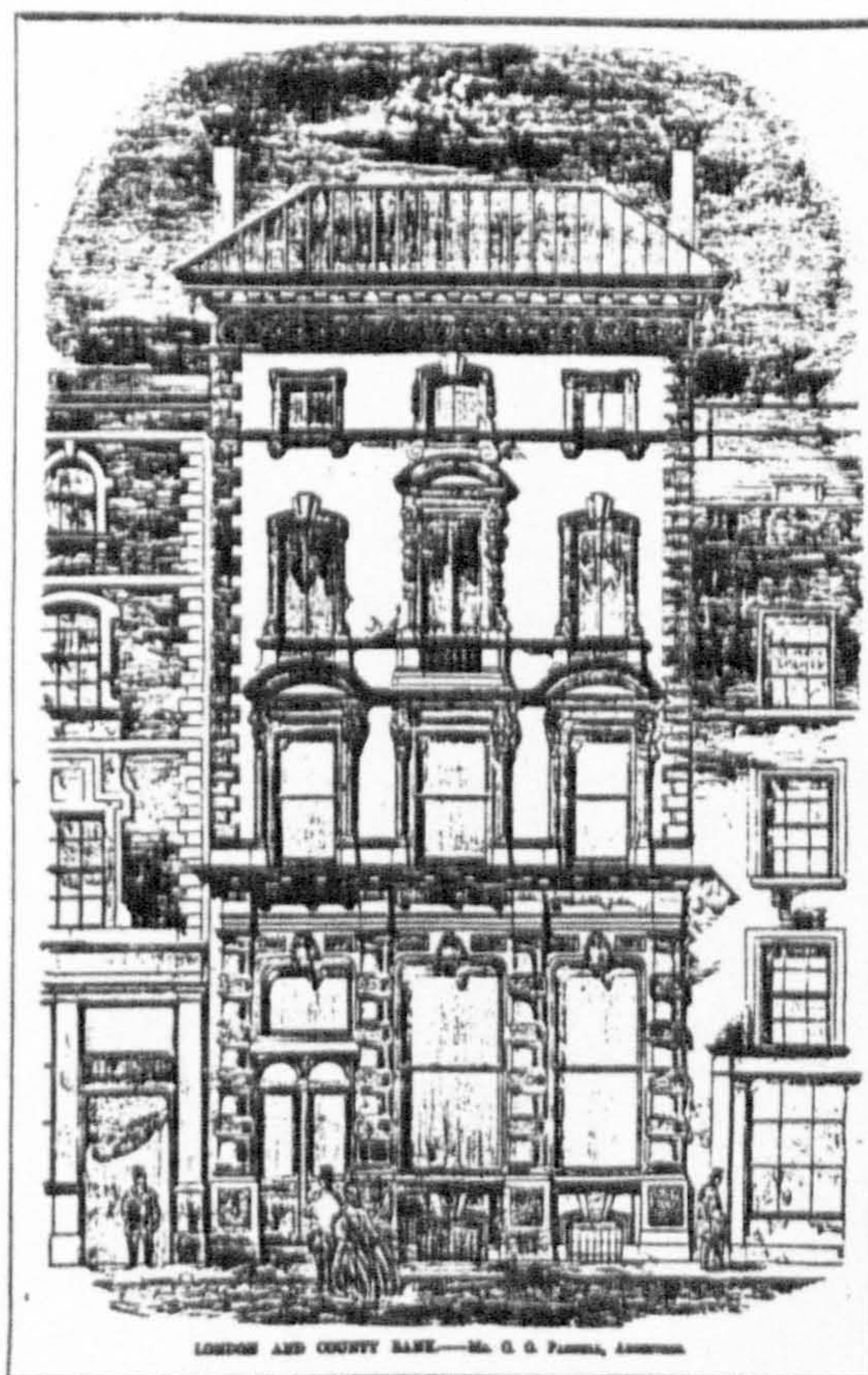
DESIGNED BY THE NATIONAL SAFE DEPOSIT CO., NEW YORK, 1873. ARCHT. - JAMES W. REED, N.Y.C.

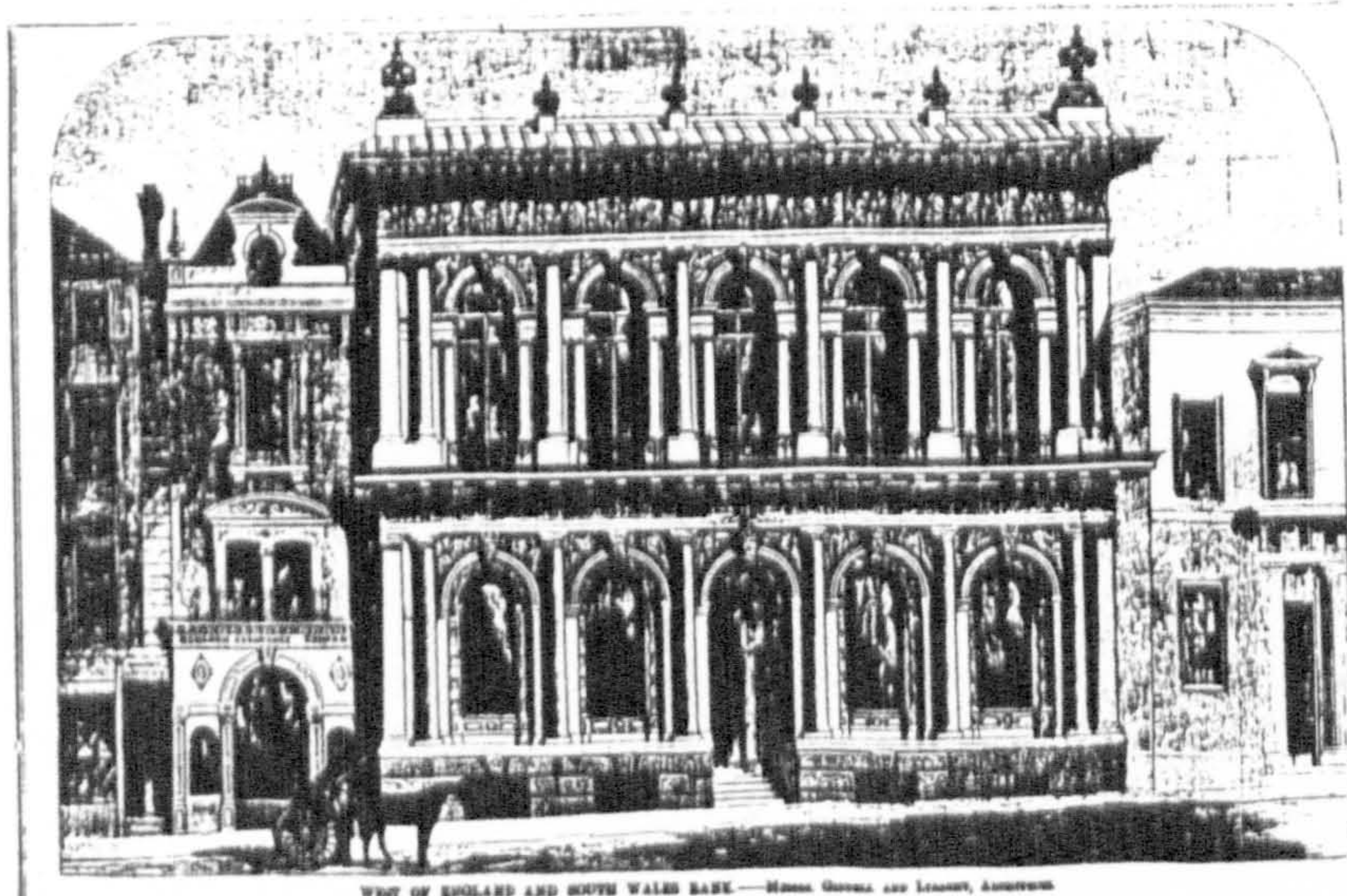


5-35

BRITISH AND FOREIGN BIBLE SOCIETY, City, 1866
LONDON AND COUNTY BANK, City, 1862

5-36



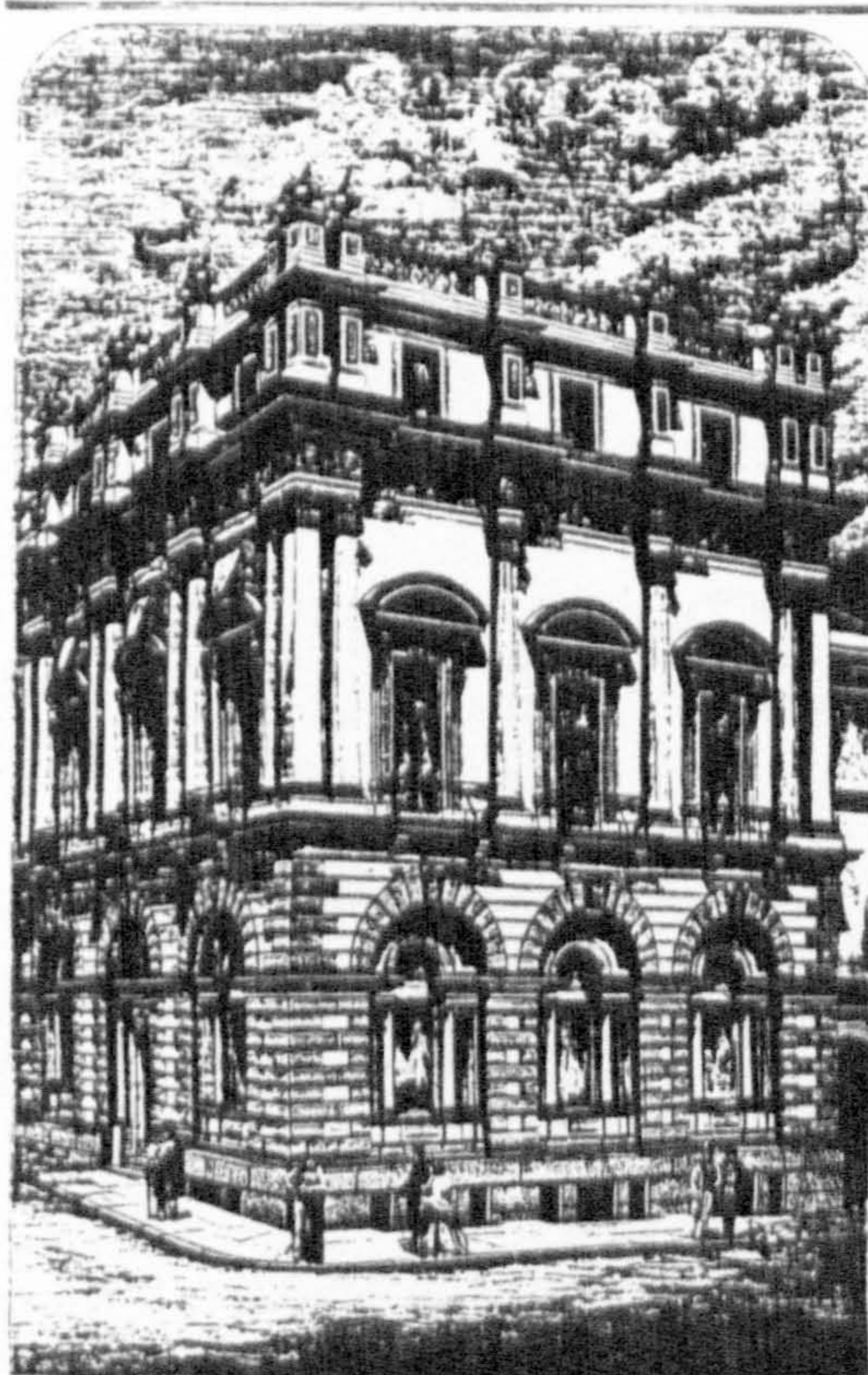


WEST OF ENGLAND AND SOUTH WALES BANK.—HARRIS, GILBERT AND LEIGHTON, ARCHITECTS.

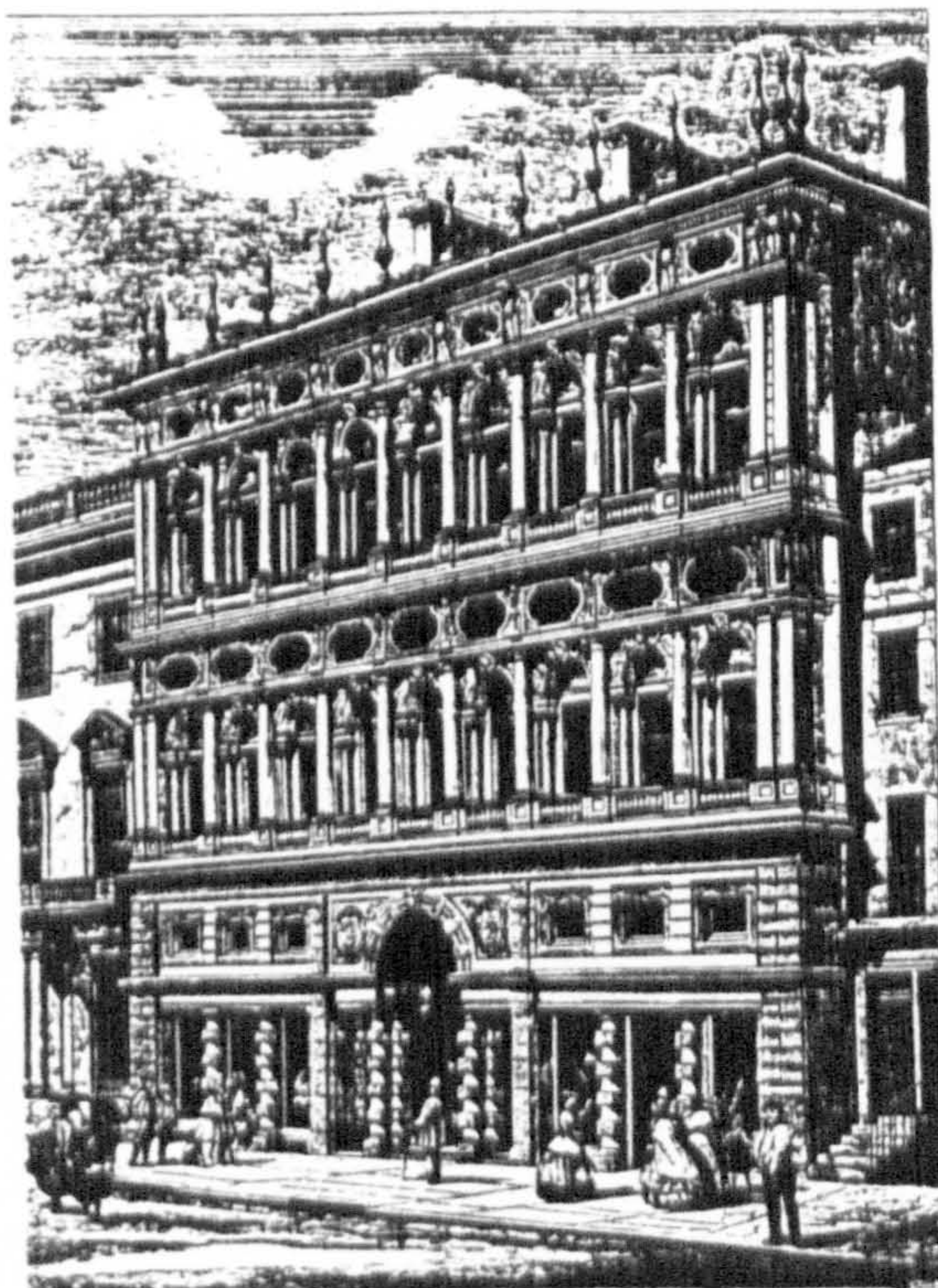
5-37

WEST OF ENGLAND AND SOUTH WALES BANK, Bristol, 1858
LEEDS AND YORKSHIRE ASSURANCE CO., Leeds, 1858

5-38



OFFICES OF THE LEEDS AND YORKSHIRE ASSURANCE COMPANY.—MR. GEORGE, ARCHITECT.

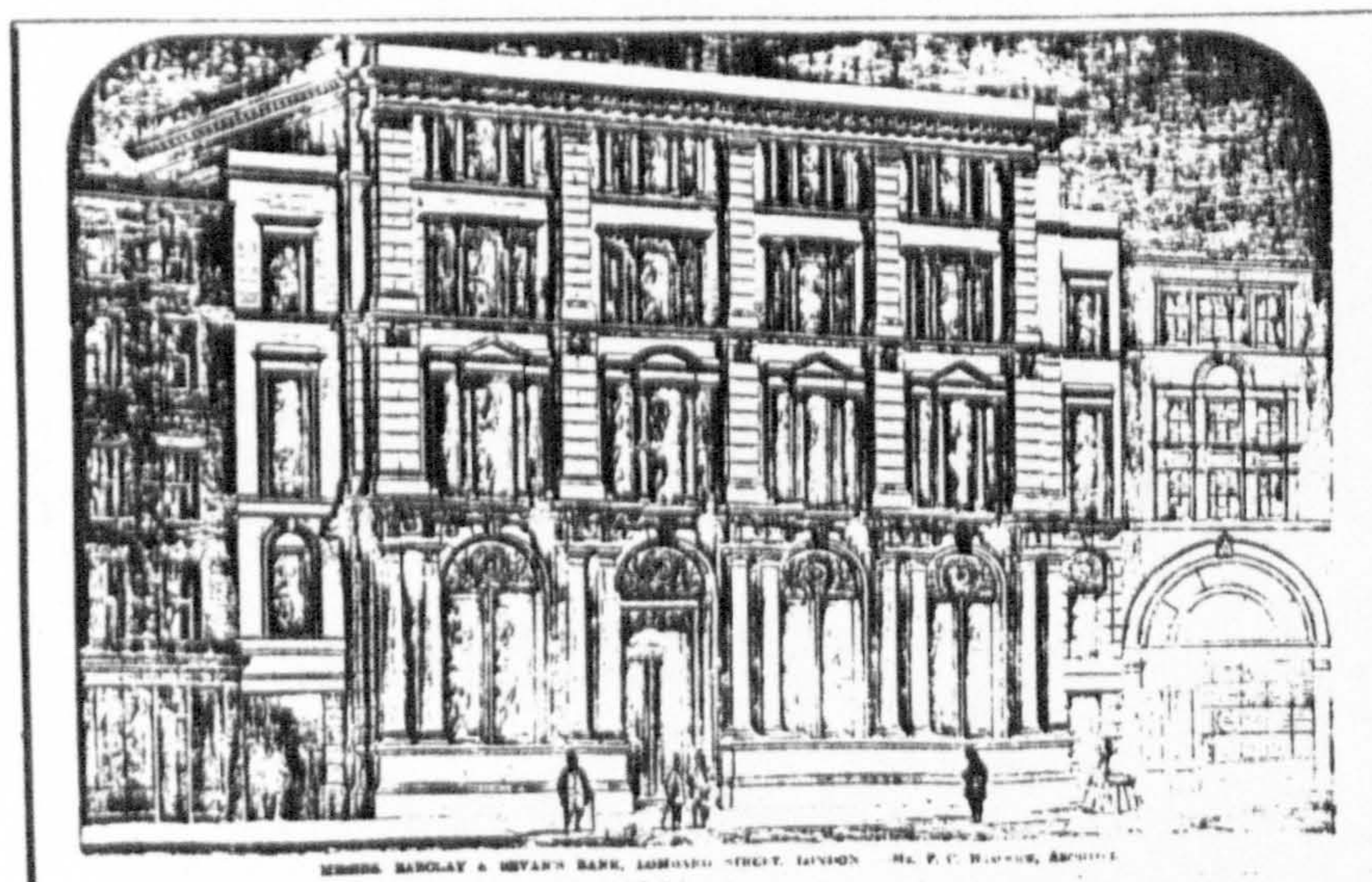


VIEW OF THE OFFICE OF THE LIFE ASSOCIATION OF SCOTLAND—MR. DAVID BROWN, ARCHT. EDINBURGH.

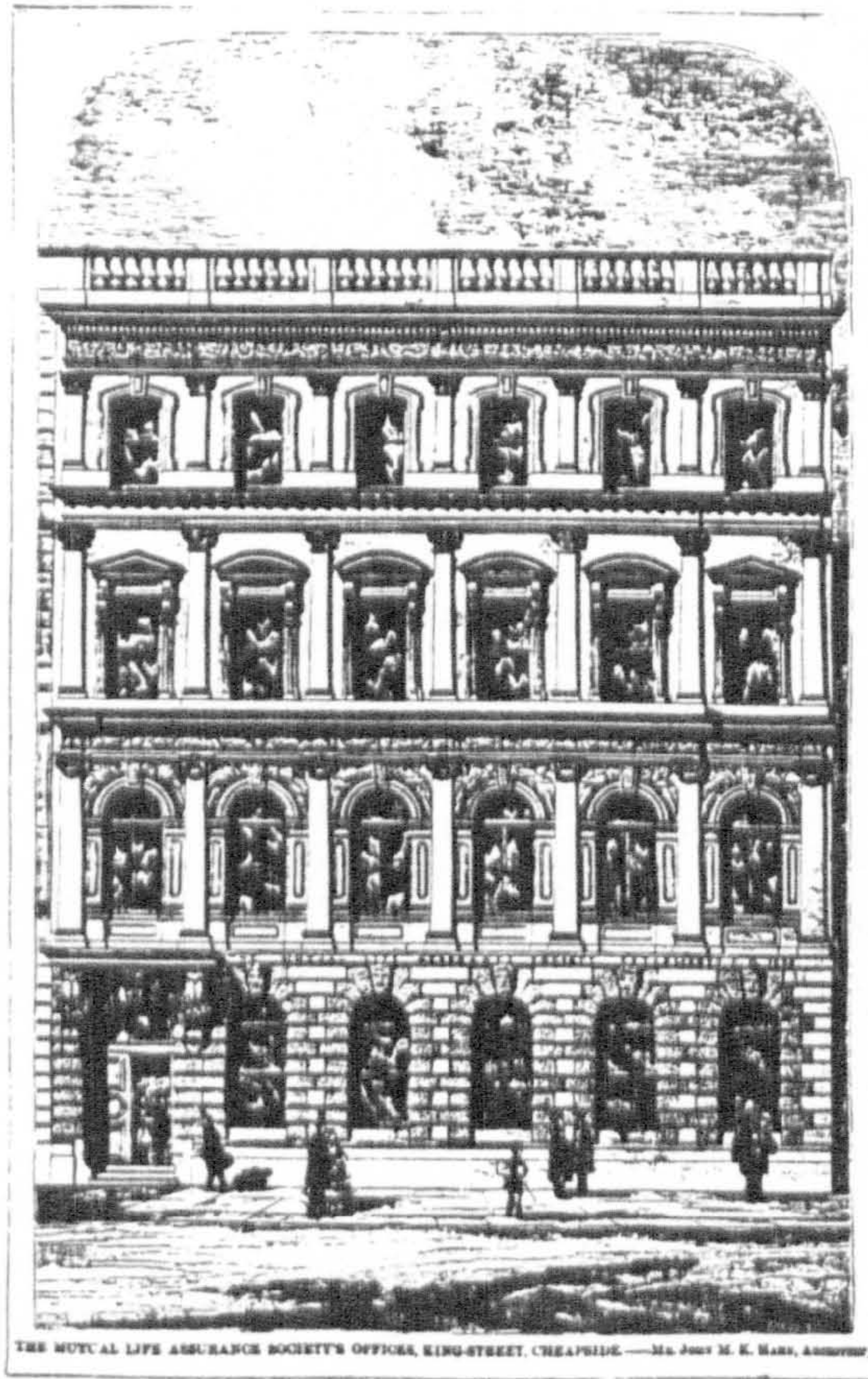
5-39

LIFE ASSOCIATION OF SCOTLAND, Edinburgh, 1859
BARCLAYS BANK, City, 1864

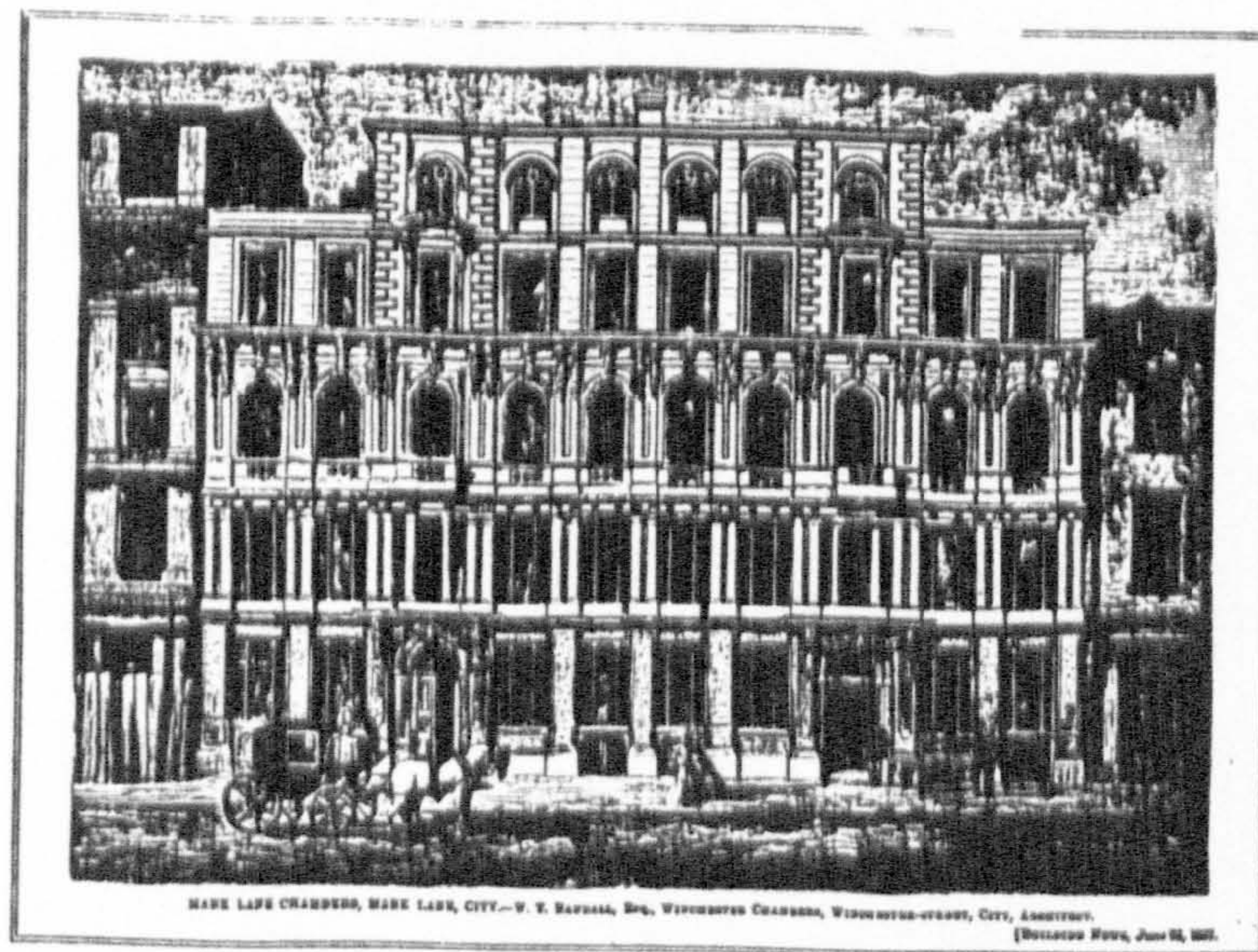
5-40

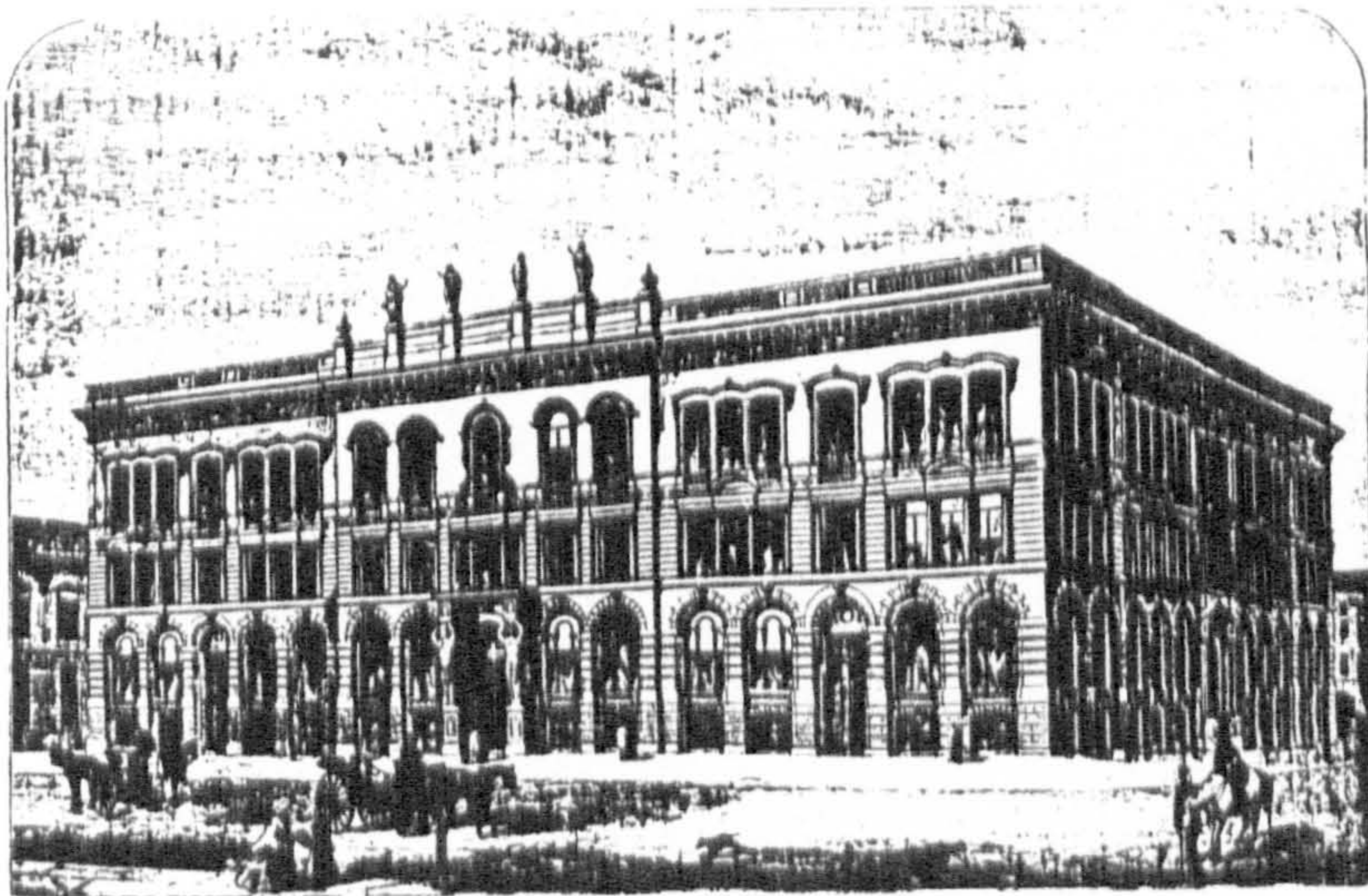


MERCHANTS BANK OF INDIA, LONDON—STREET. LONDON—MR. P. C. WATSON, ARCHT.



5-41
 MUTUAL LIFE ASSURANCE SOCIETY, City, 1859
 MARK LANE CHAMBERS, City, 1857
 5-42



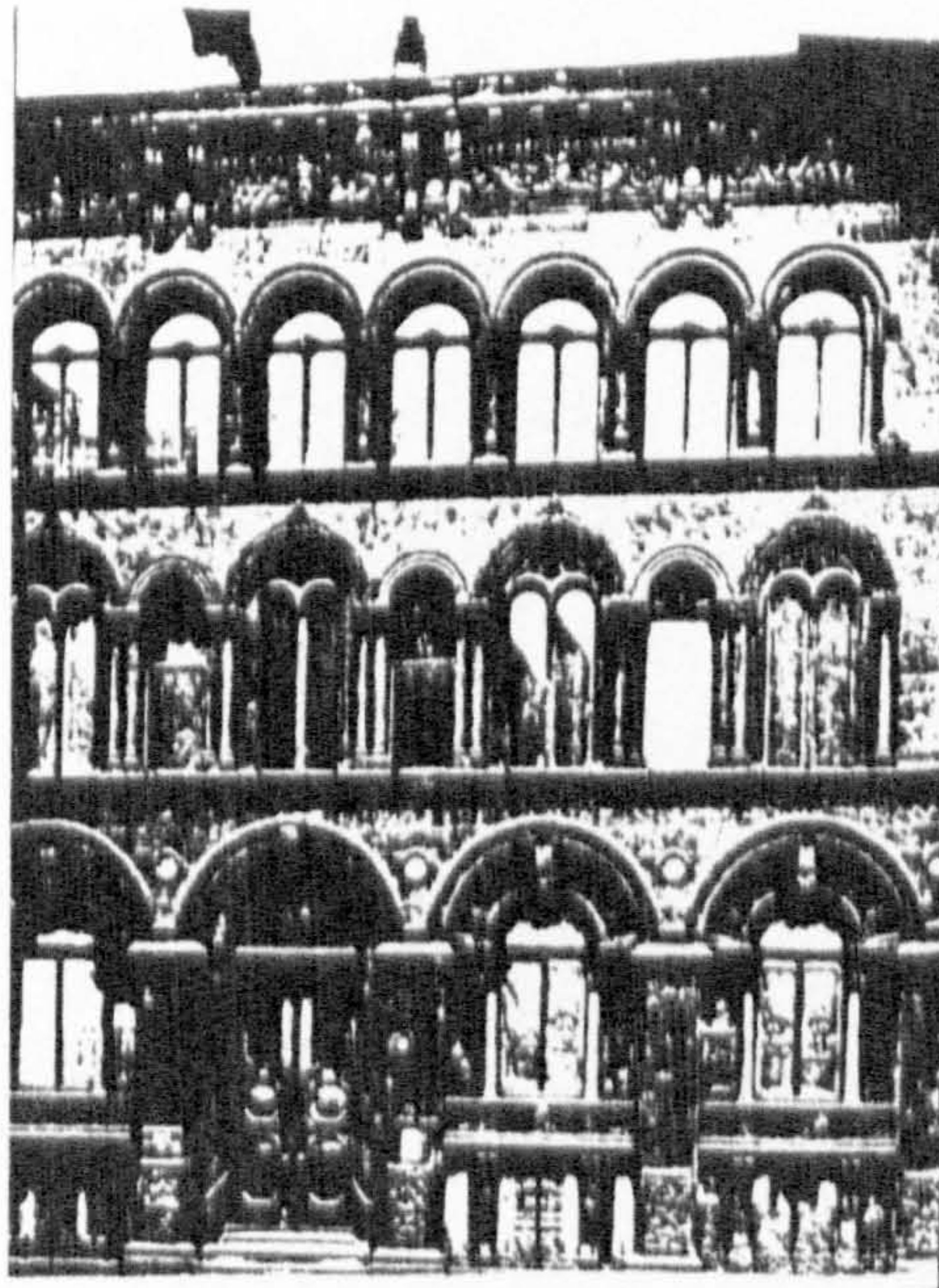


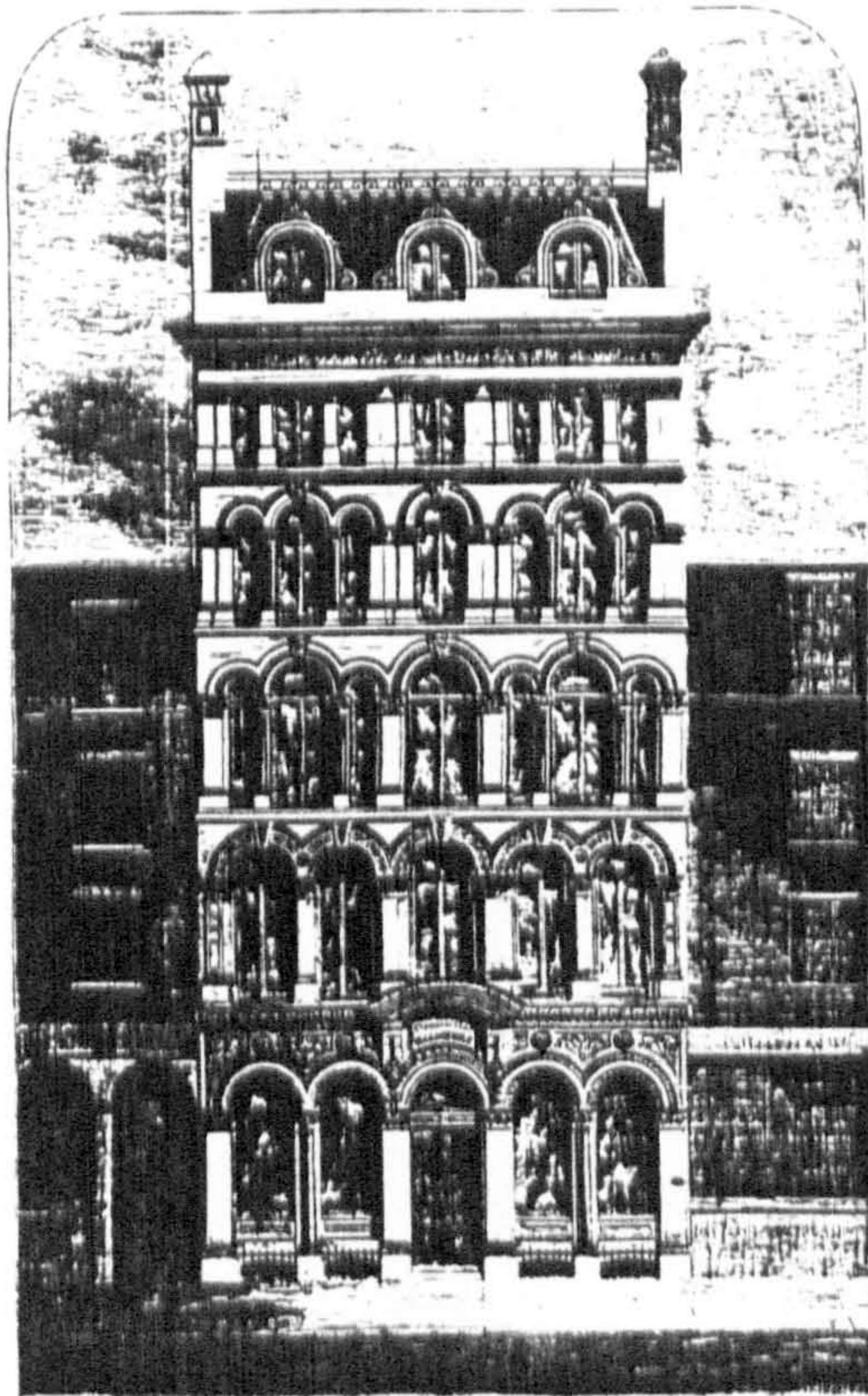
STREET ARCHITECTURE OF LIVERPOOL: BROWN'S BUILDING. - Mr. J. A. Paine, Architect.

5-43

BROWN'S BUILDING, Liverpool, 1863
 RICHMOND BUILDING, Liverpool, 186-

5-44





CORNHILL CHAMBERS, LONDON.—MR. EDWARD WOODWARD, ARCHT.

5-45

CORNHILL CHAMBERS, City, 1866

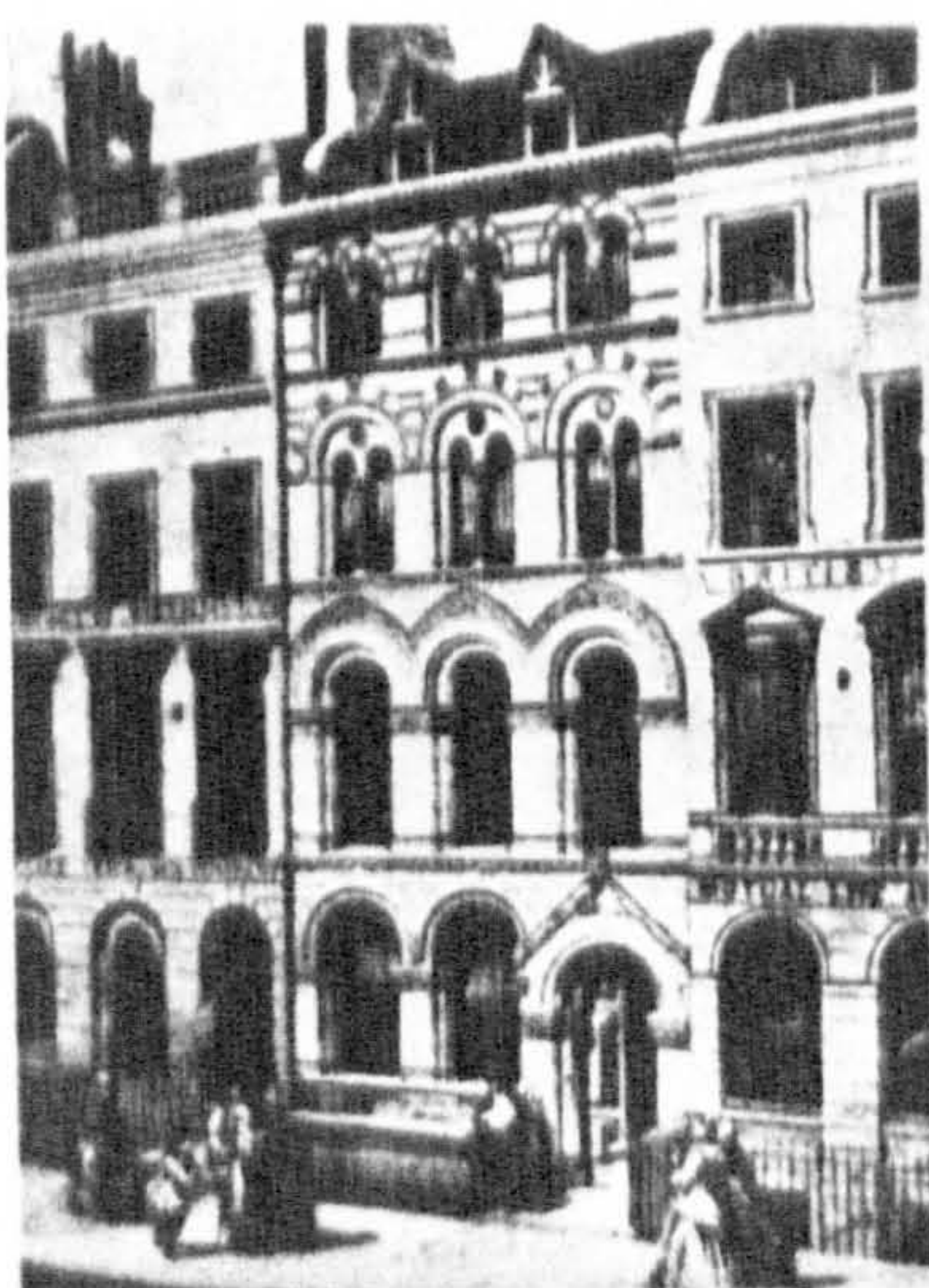
GRESHAM LIFE ASSURANCE CO., City, 1878

5-46

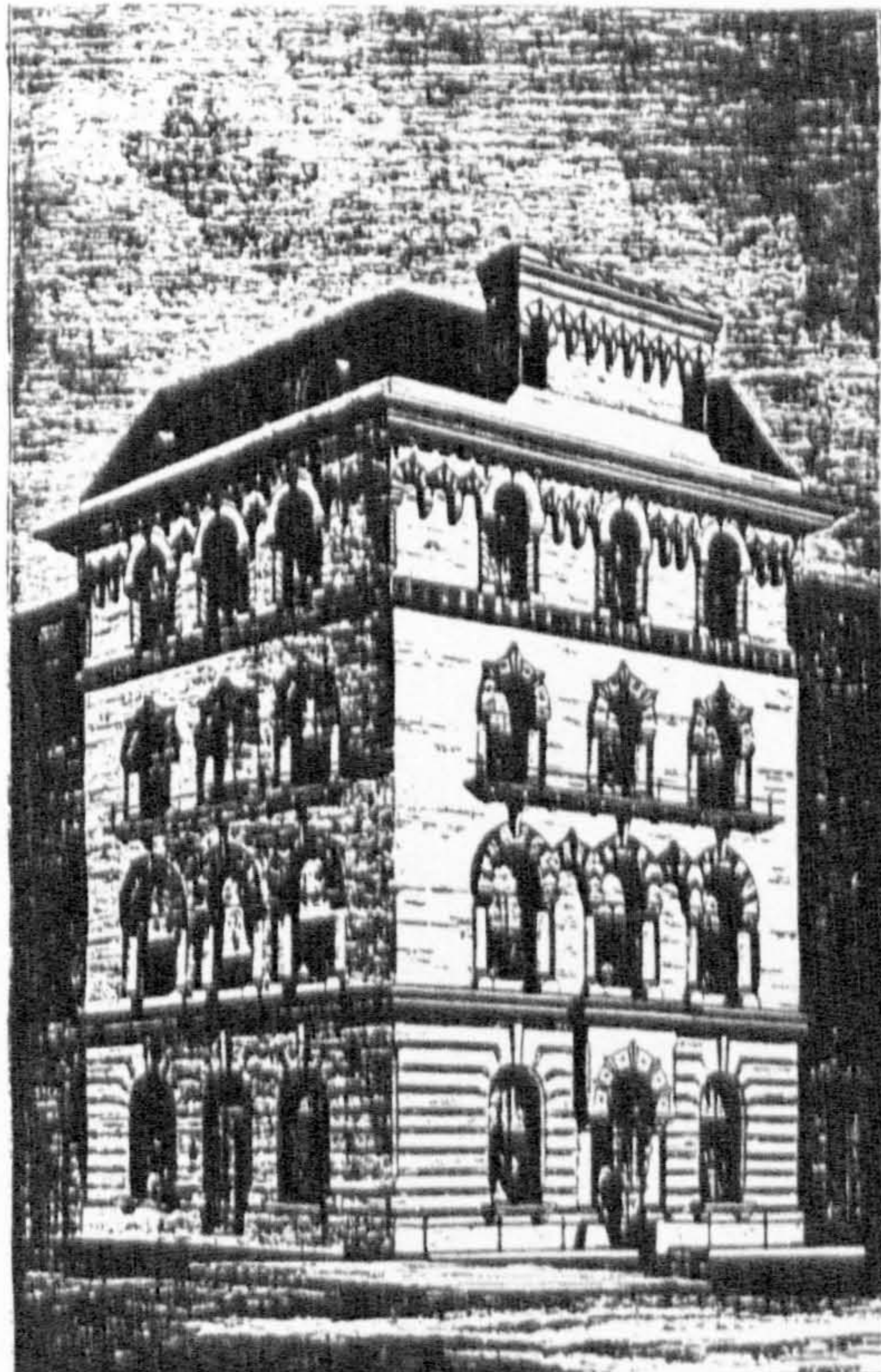


OFFICES of THE GRESHAM LIFE ASSURANCE SOCIETY SAINT MILDRED'S HOUSE THE POULTRY LONDON.

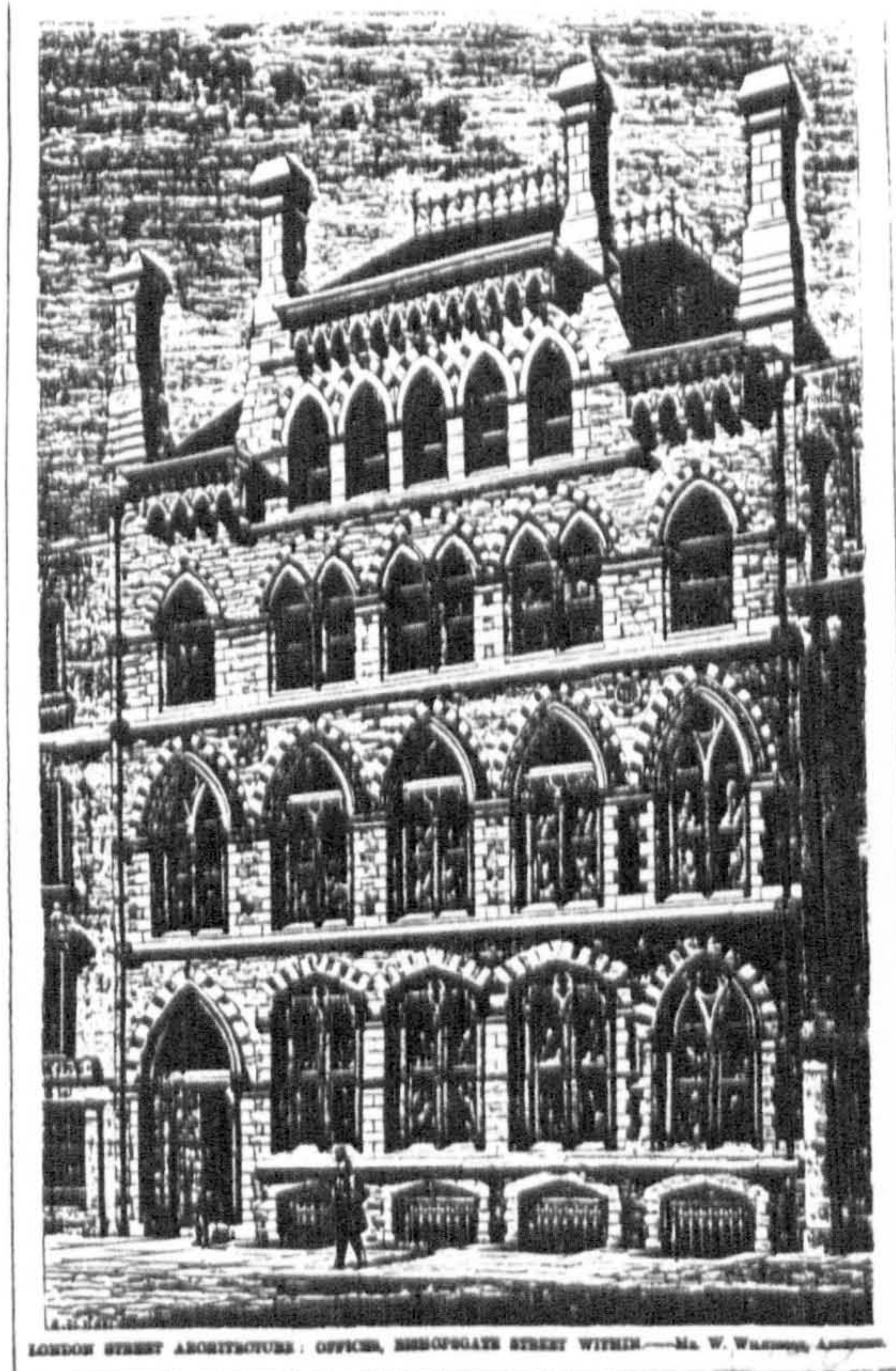
J.J. COLE ARCHT. 1878.



5-47
CROWN LIFE, City, 1855
TAVISTOCK CHAMBERS, City, 1857
5-48

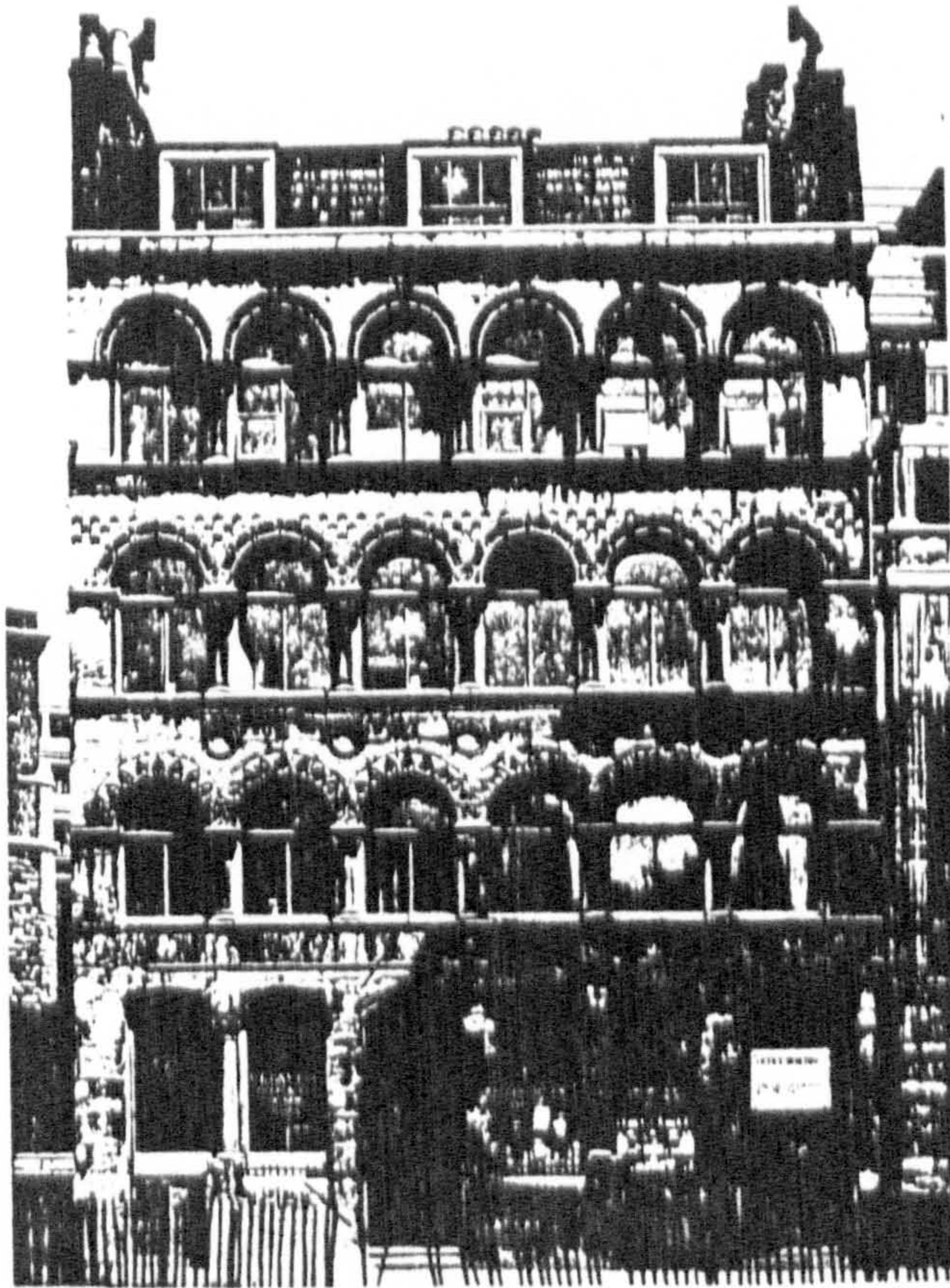


TAVISTOCK CHAMBERS, SOUTHAMPTON STREET, STRAND. — MR. CHARLES GRAY, ARCHT. 1857.



5-49
 CROSBY HOUSE, City, 1861
 ROYAL INSURANCE CO., Manchester, 1862
 5-50

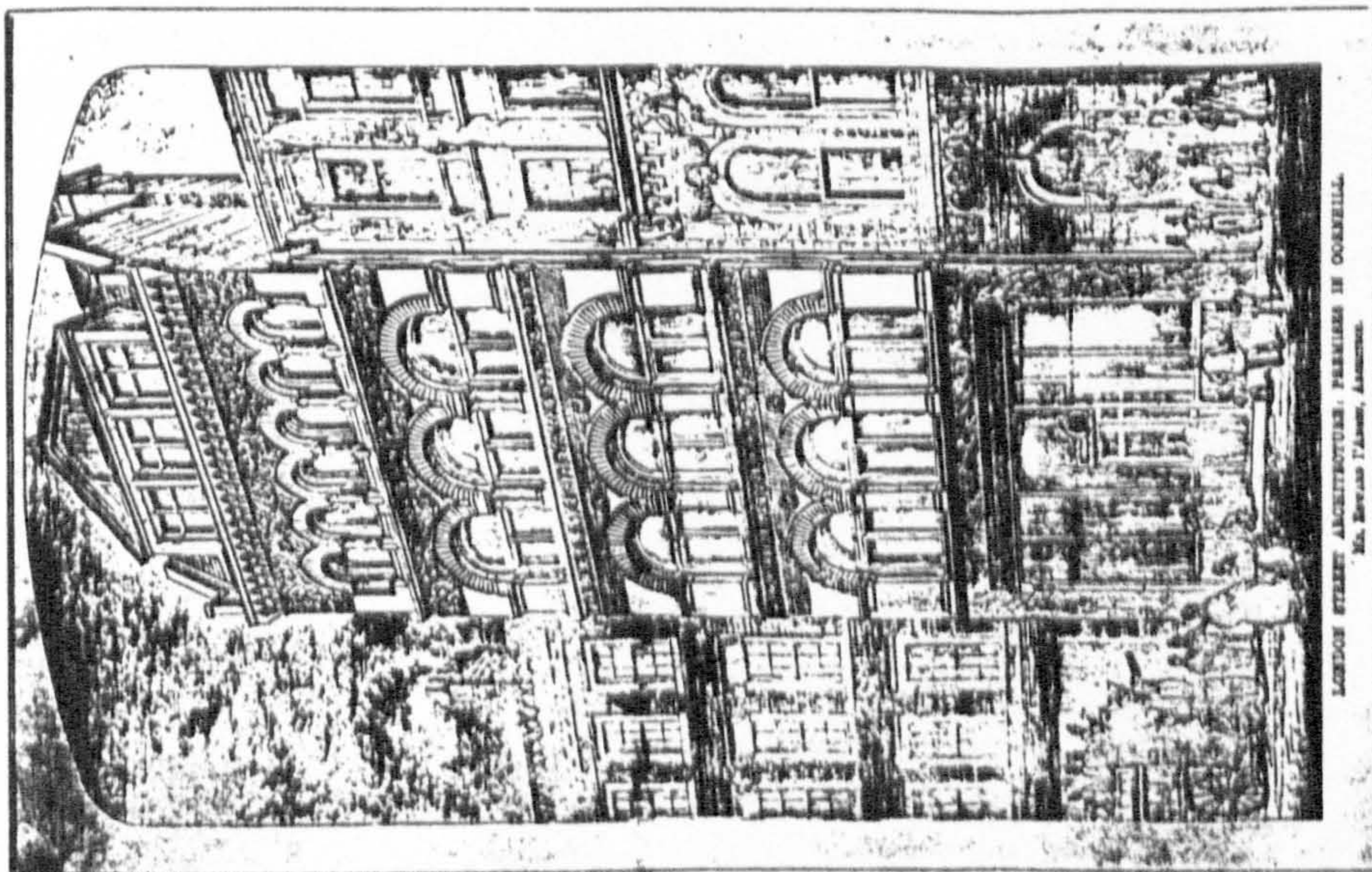


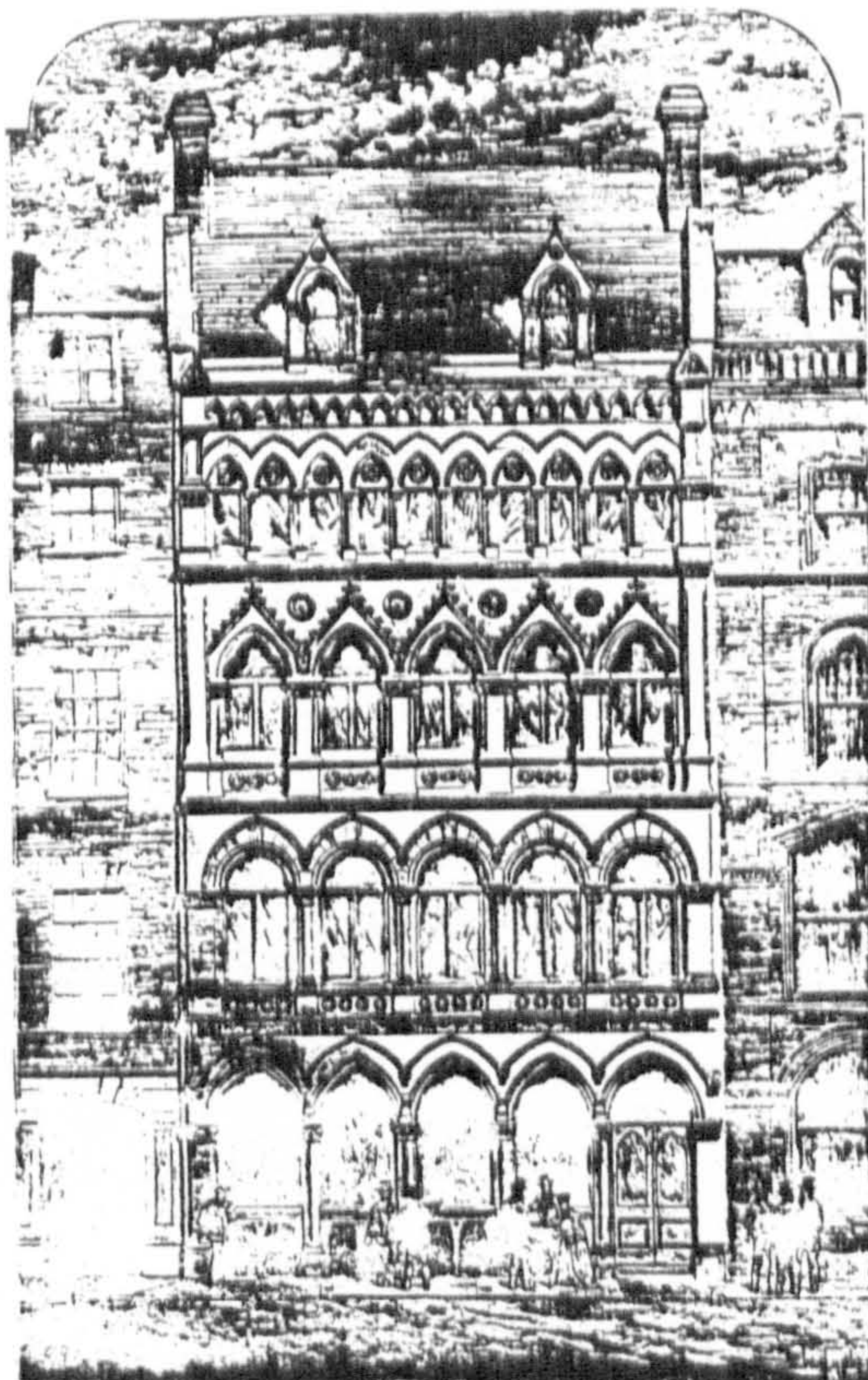


5-51

CITY OF LONDON REAL PROPERTY CO., City, 1864
66 CORNHILL, City, 1871

5-52



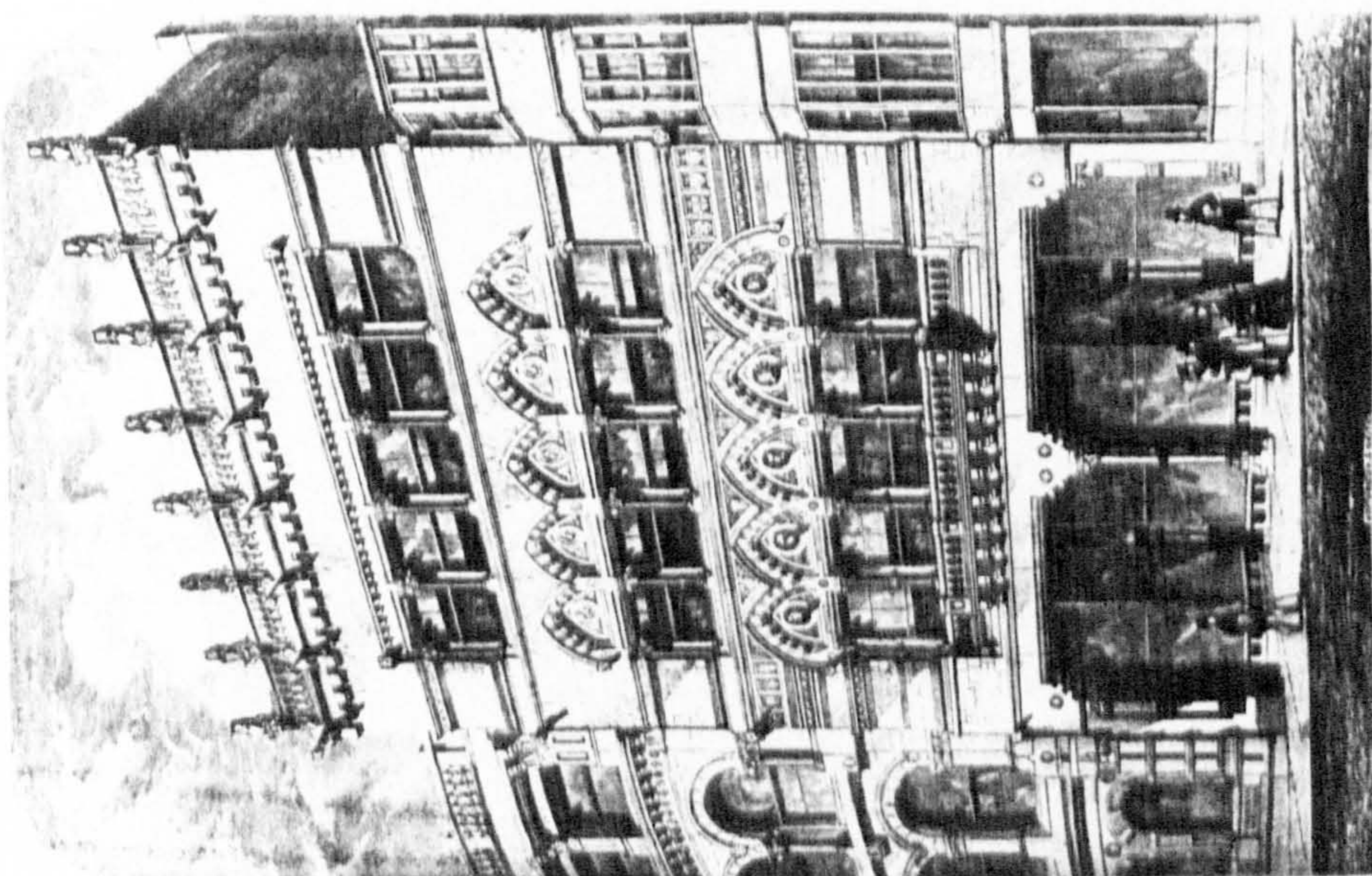


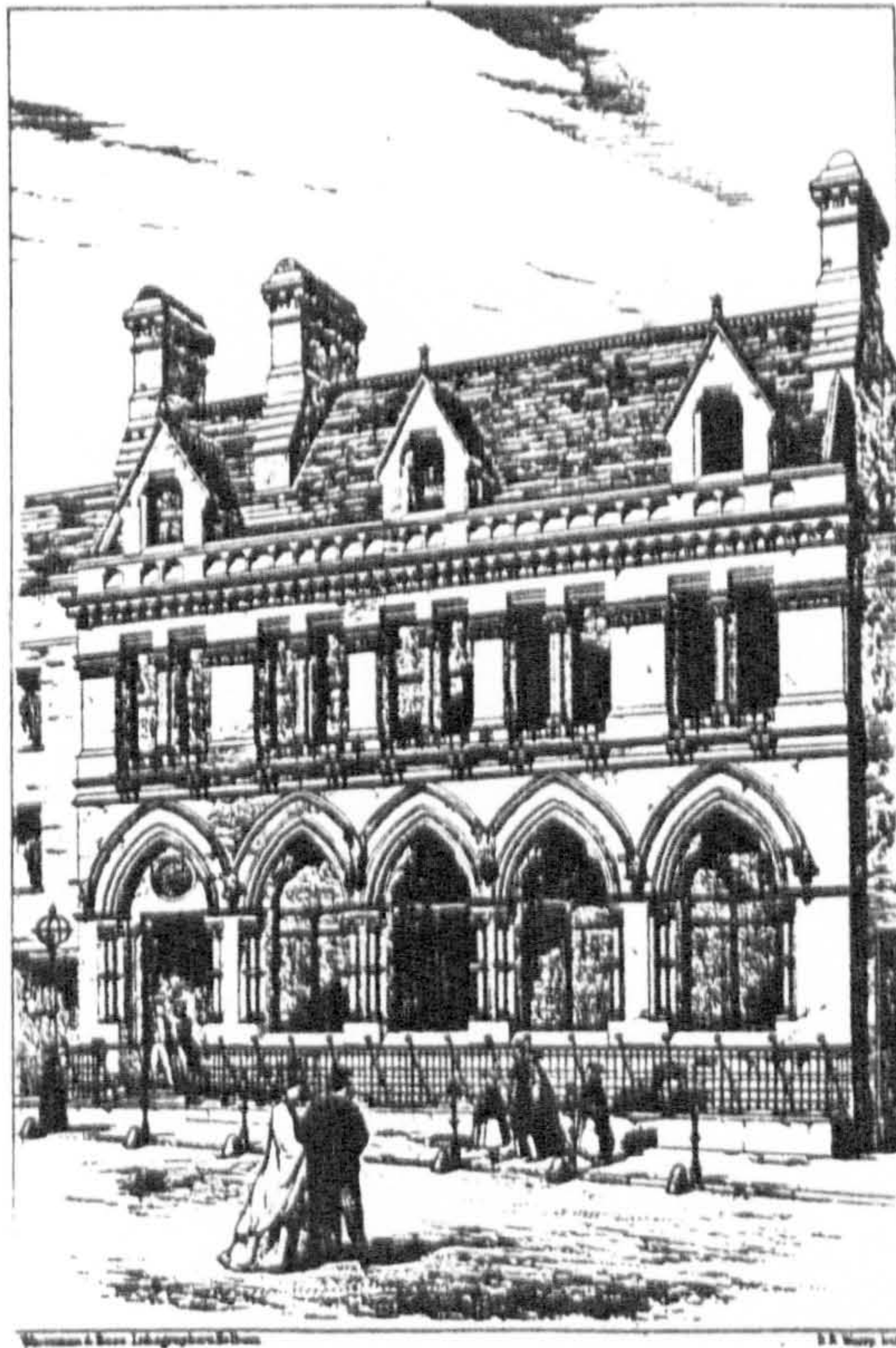
LONDON STREET ARCHITECTURE: OFFICES, THROGMORTON STREET AND AUSTIN FRANKS.
 Mr. T. GOSWOLD CLARK, ARCHT.

5-53

THROGMORTON ST. OFFICES, City, 1870
 STREET ARCHITECTURE, Bristol, 1869

5-54



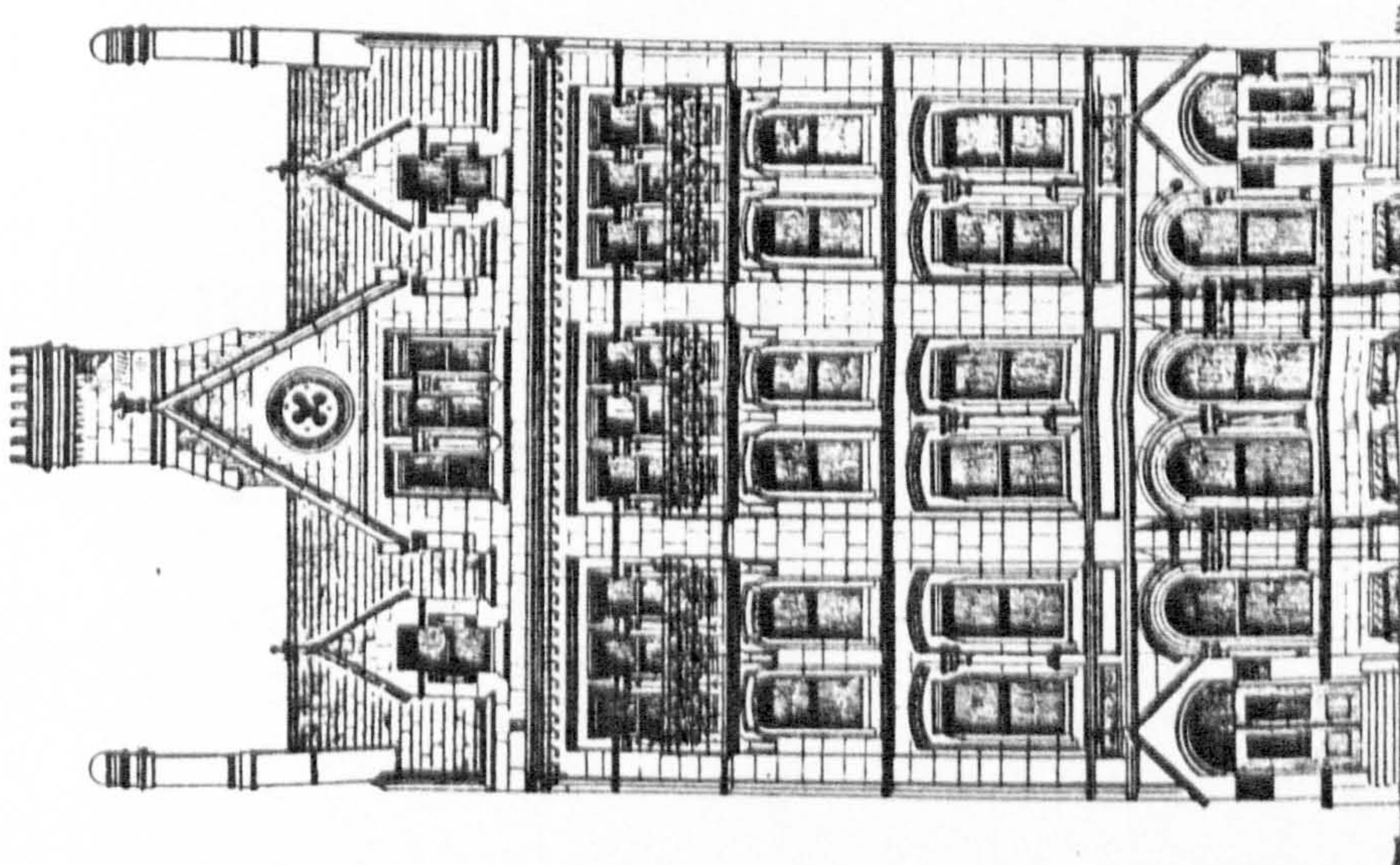


Wm. Bassett, Son & Harris New Bank, Leighton Buzzard.
ALFRED WATERHOUSE, ESQ. ARCHT.

5-55

BASSETT, SON AND HARRIS, Leighton Buzzard, 1866
EQUALITY AND LAW ASSURANCE SOCIETY BUILDING, City, 1872

5-56

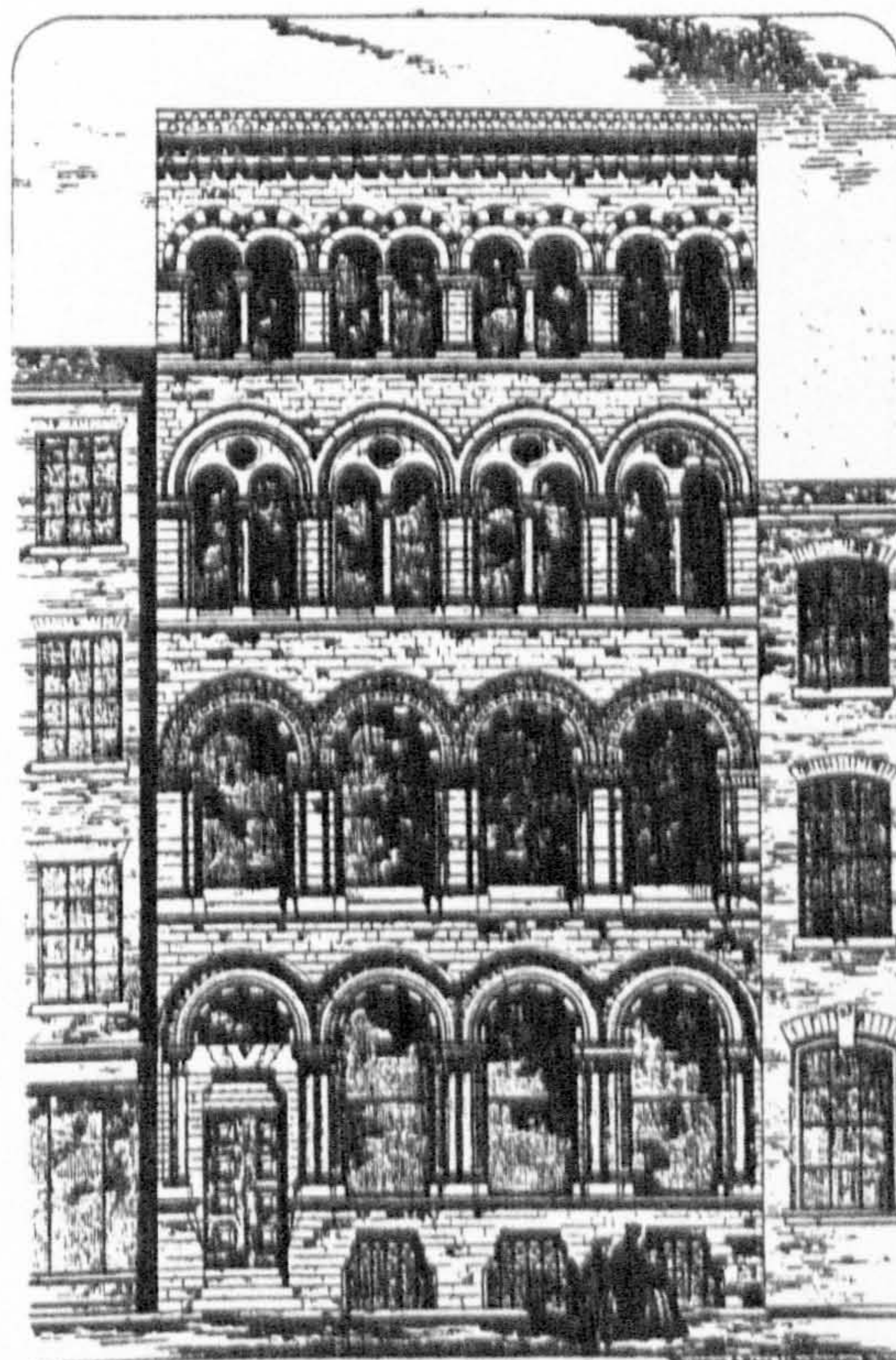




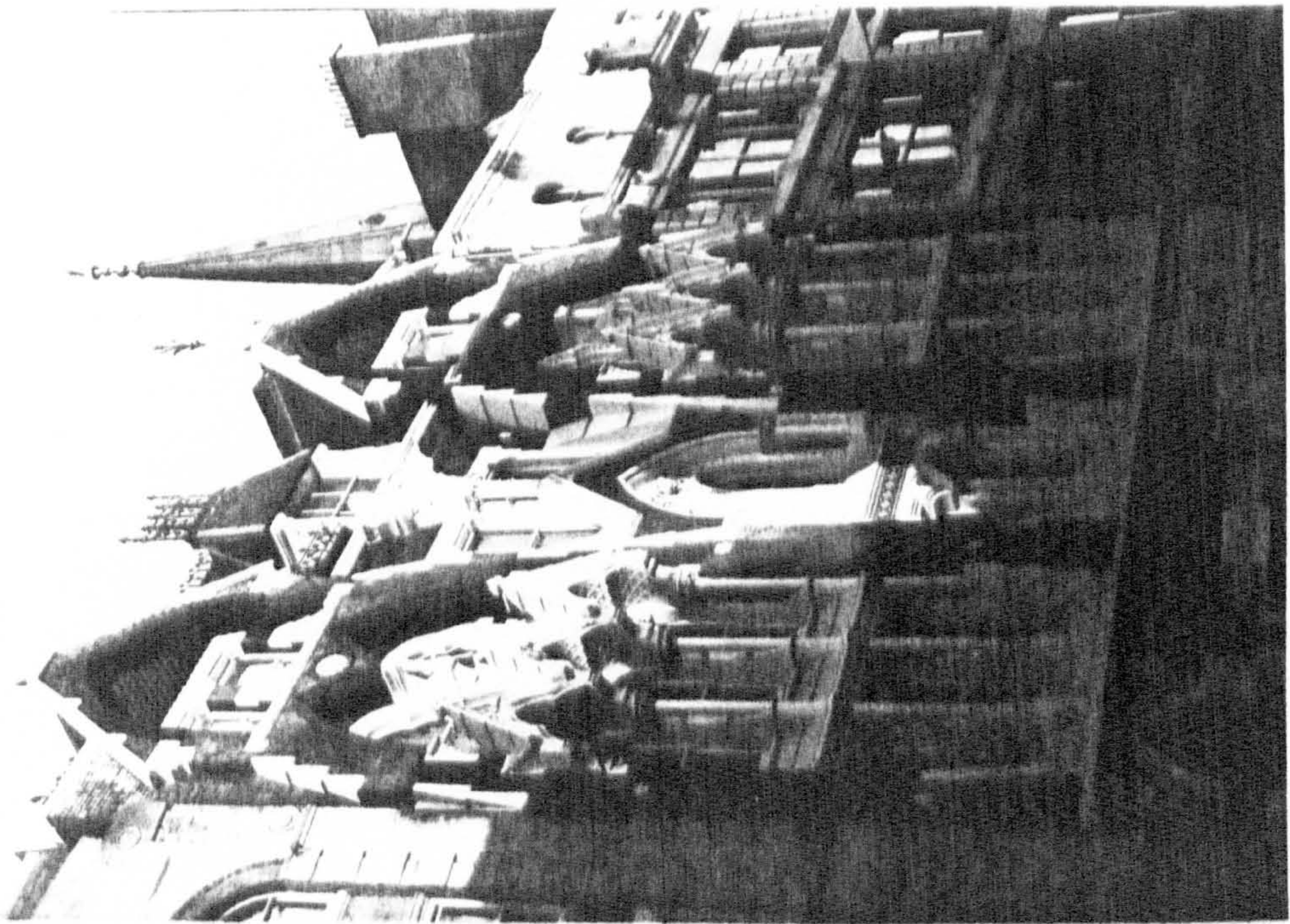
5-57

GENERAL CREDIT CO., City, 1866
103 CANNON STREET, City, 1866

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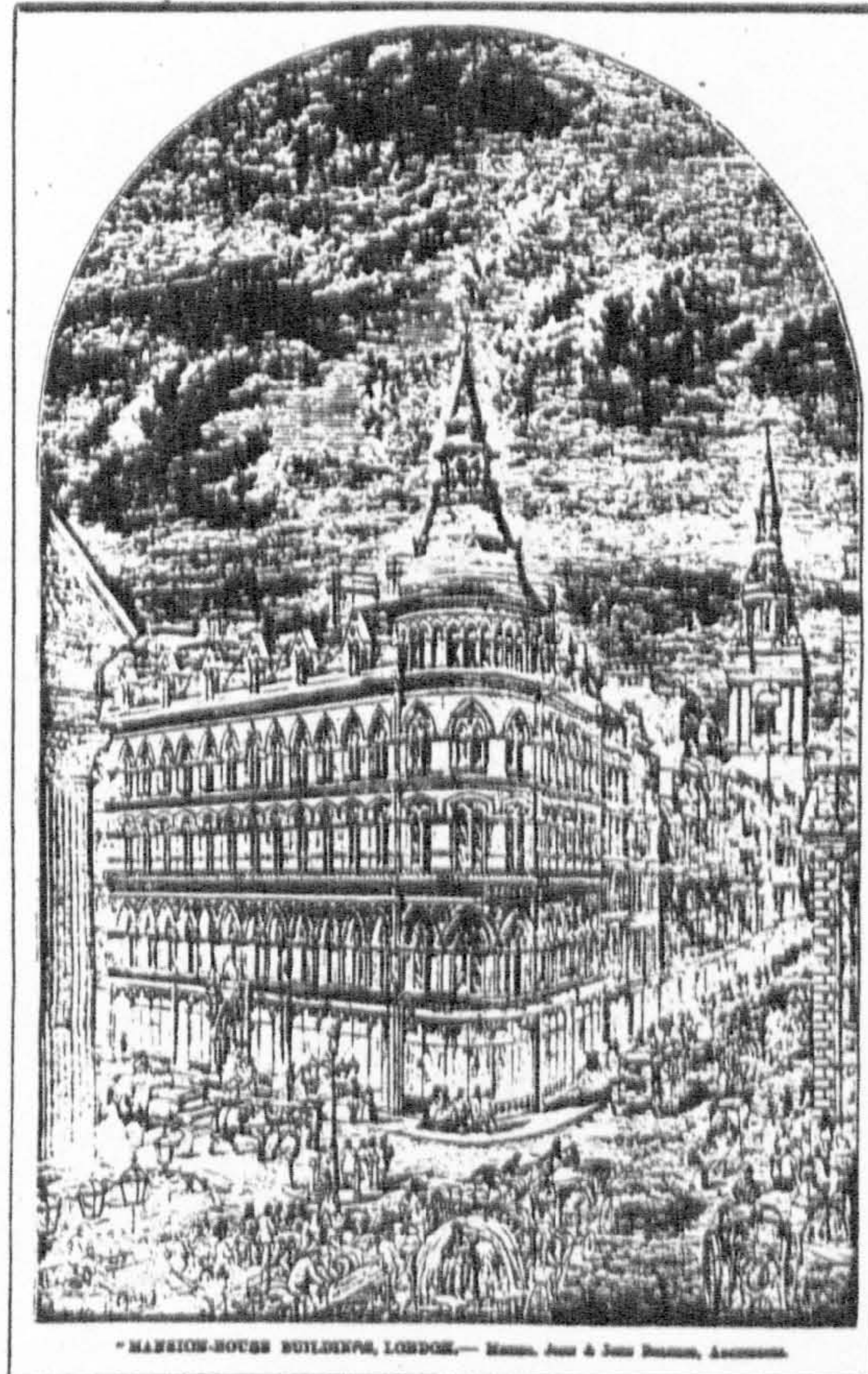
New Offices for Registered Land Comp! 85, 86 and 87, Cannon St.
BY FRED JAMESON, ARCHT.

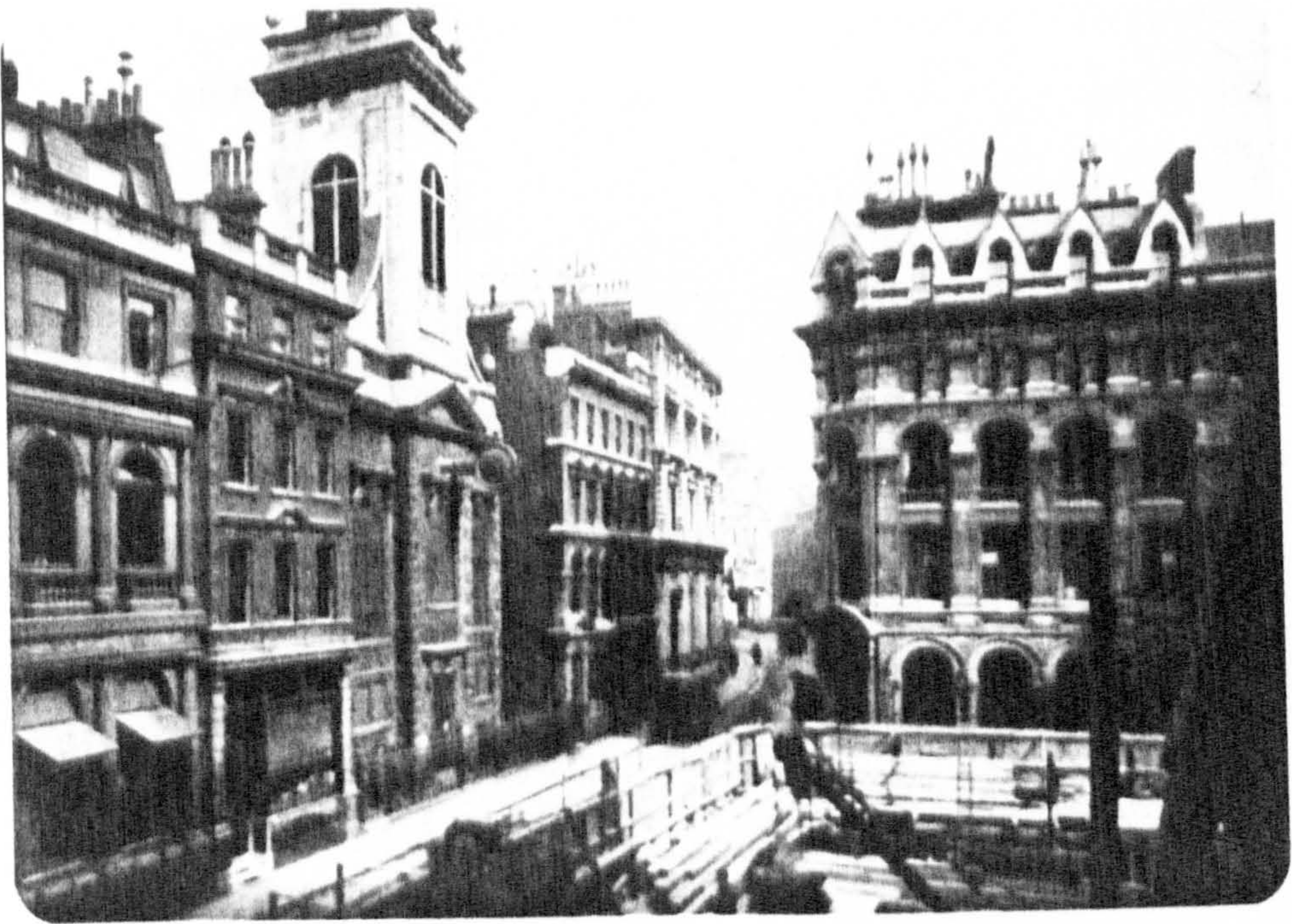


5-59

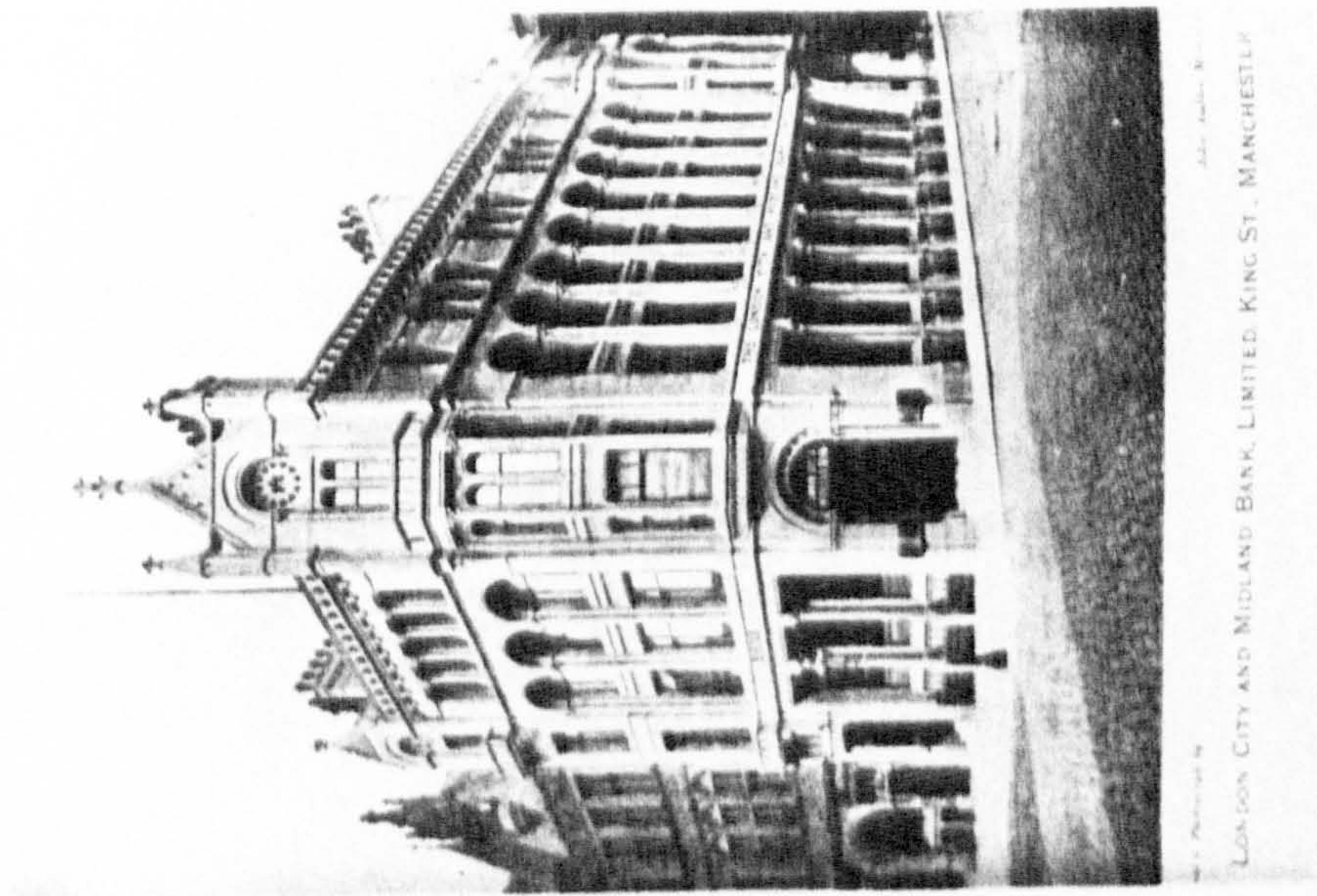
WORCESTER HOUSE, City, 1868
MANSION HOUSE BUILDINGS, City, 1871

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5-61
 ALEXANDER CUNLIFFE AND CO., City, 1864
 LONDON CITY AND MIDLAND BANK, Manchester, 18--
 5-62





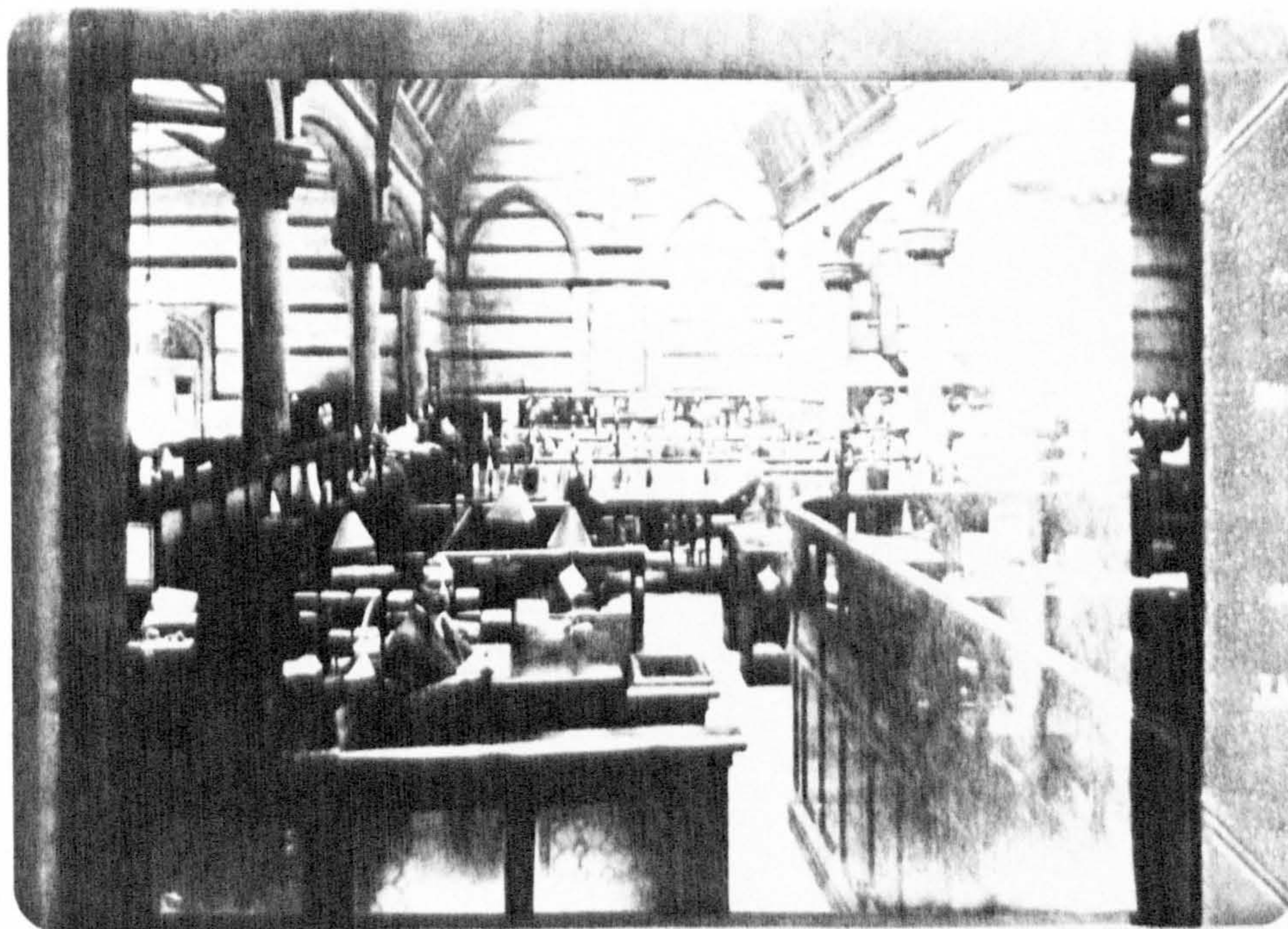
THE MANCHESTER AND COUNTY BANK, KING-STREET, MANCHESTER.
HARRIS, HALL & HINDS, ARCHT.

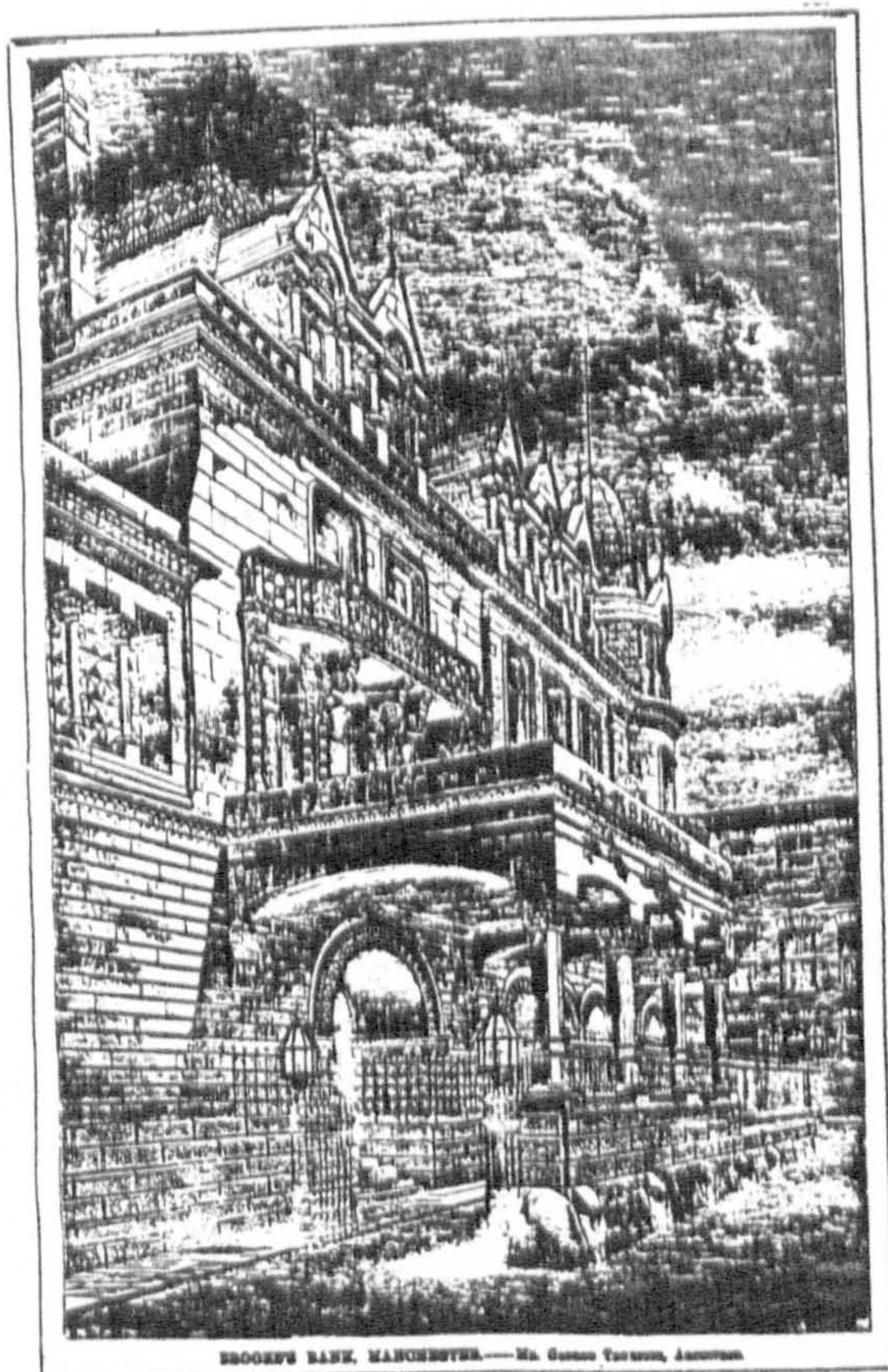
5-63

MANCHESTER AND COUNTY BANK, Manchester, 1880

MANCHESTER AND COUNTY BANK, Manchester, 1880

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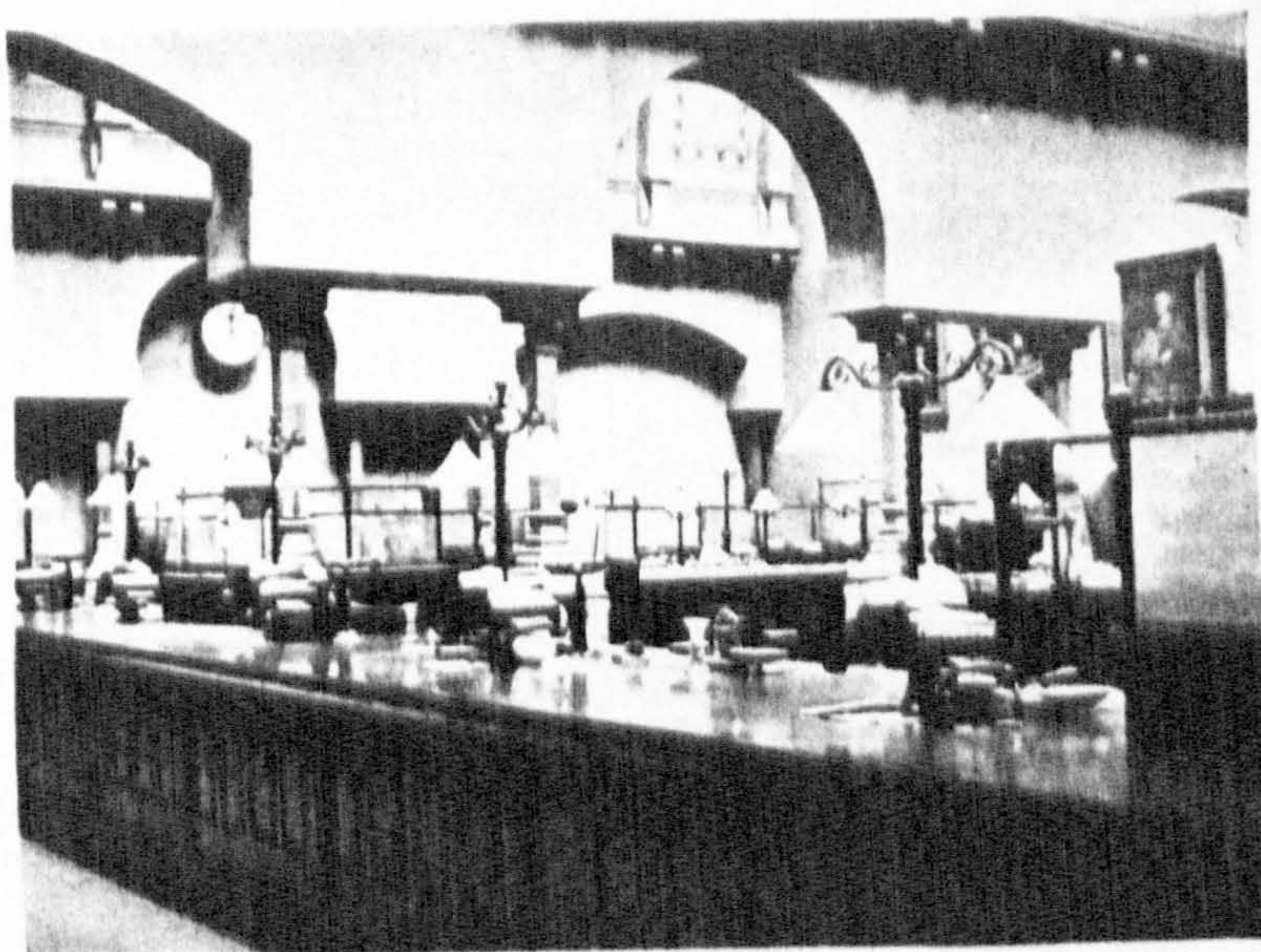
BROOKS BANK, MANCHESTER.—Mr. George Thomson, Architect.

5-65

BROOKS BANK, Manchester, 1870

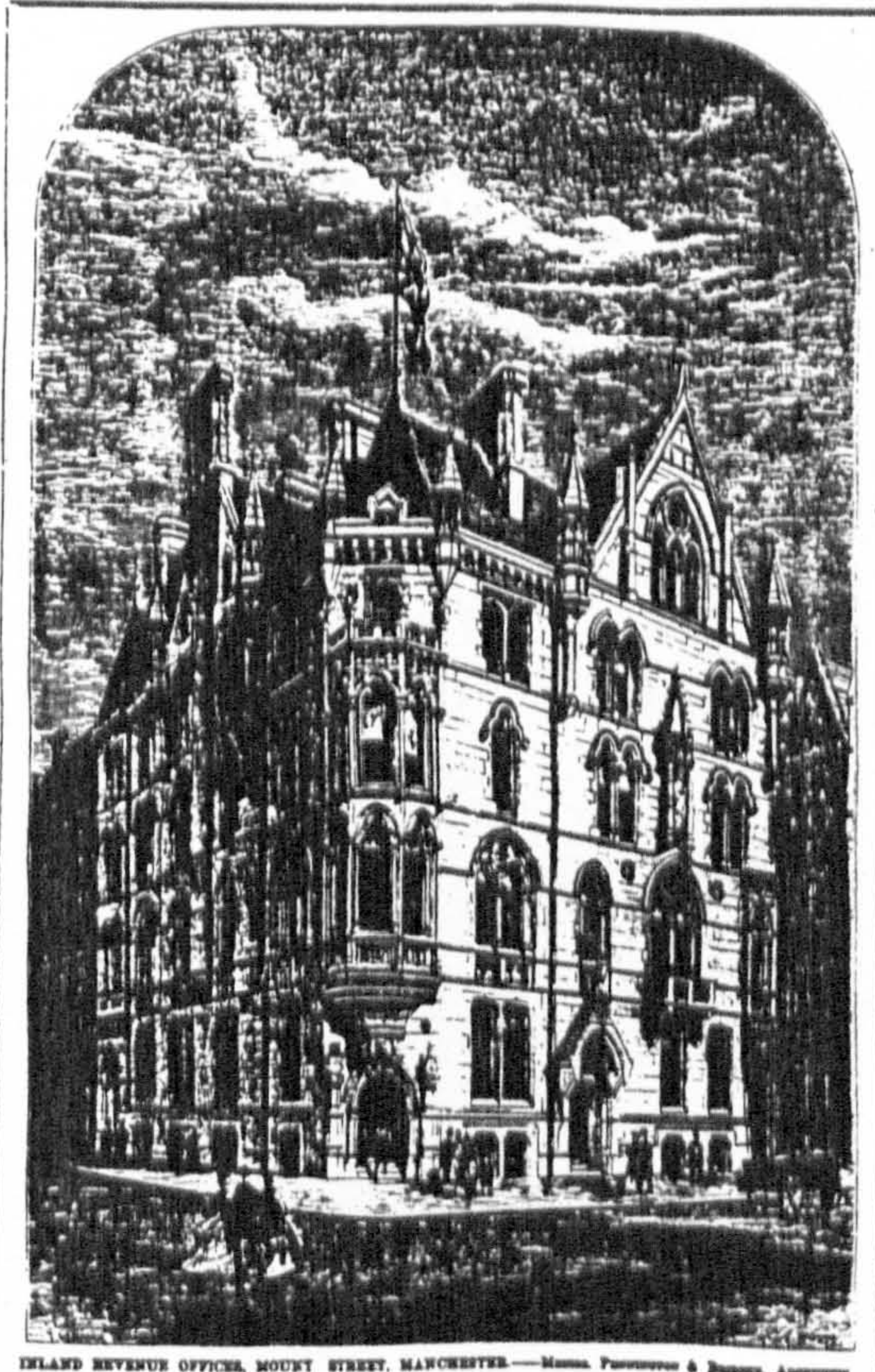
BROOKS BANK, Manchester, 1870

5-66



LEEDS BANK LTD. MANCHESTER

Mr. J. Charles Begg



INLAND REVENUE OFFICES, MOUNT STREET, MANCHESTER.—Messrs. FARRINGTON & BROWN, ARCHITECTS.

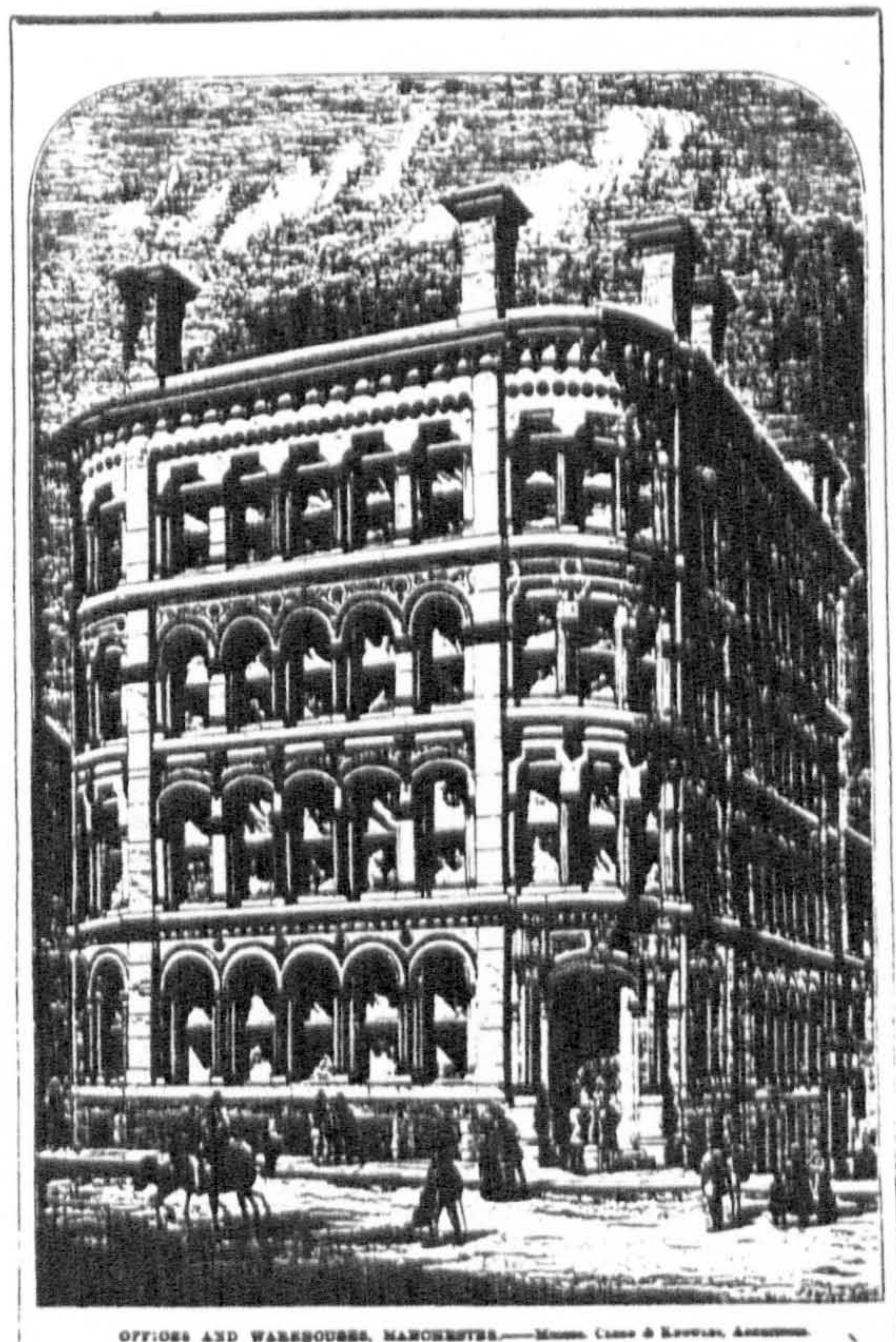
5-67

INLAND REVENUE OFFICES, Manchester, 1876
SCOTTISH WIDOWS FUND, Manchester, 18--

5-68



SCOTTISH WIDOWS FUND OFFICES.—MR. G. T. BENNETT, F.R.I.B.A., ARCHITECT.



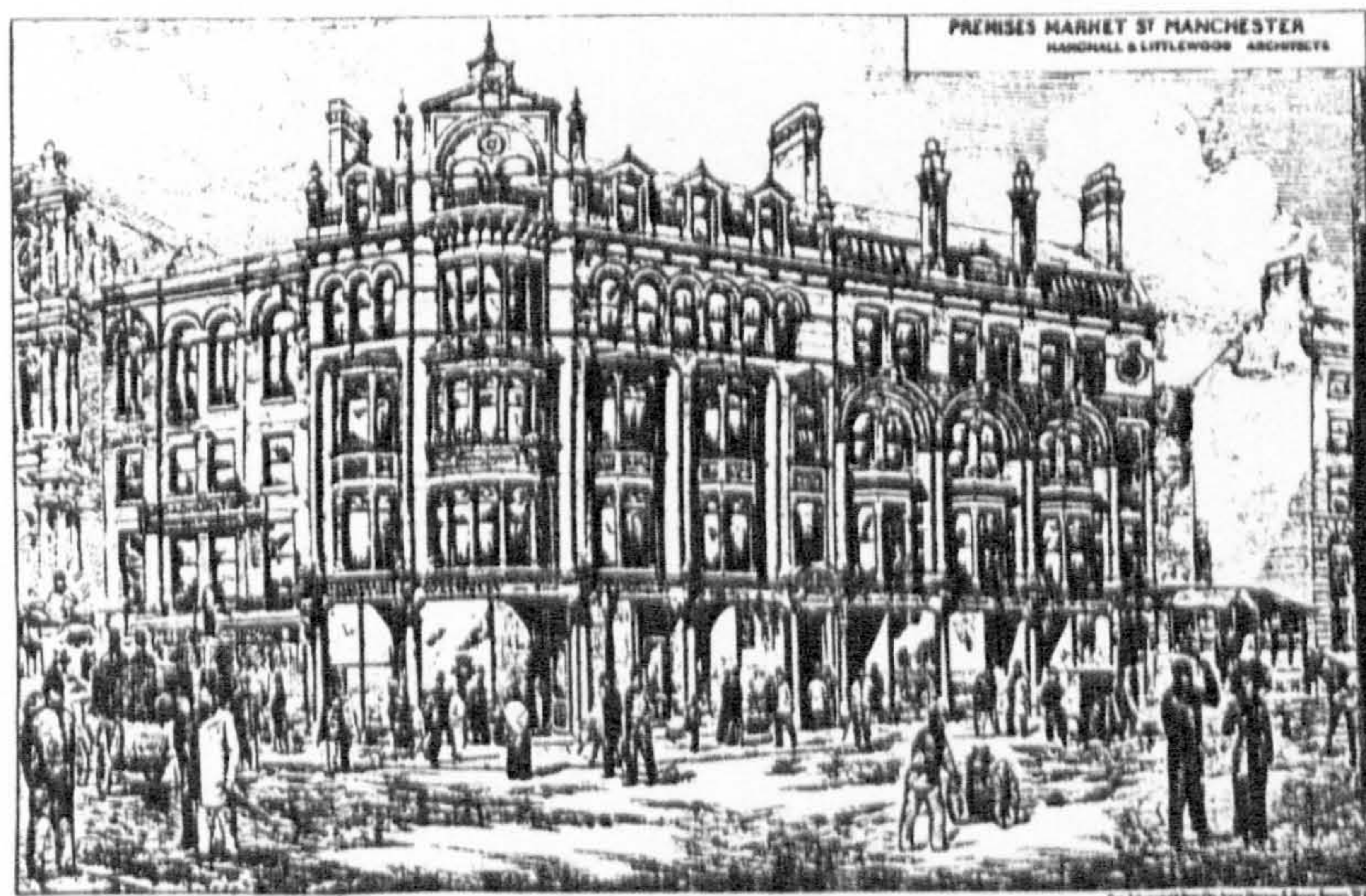
OFFICES AND WAREHOUSES, MANCHESTER.—MASON, CLARK & KENNEDY, ARCHTDS.

5-69

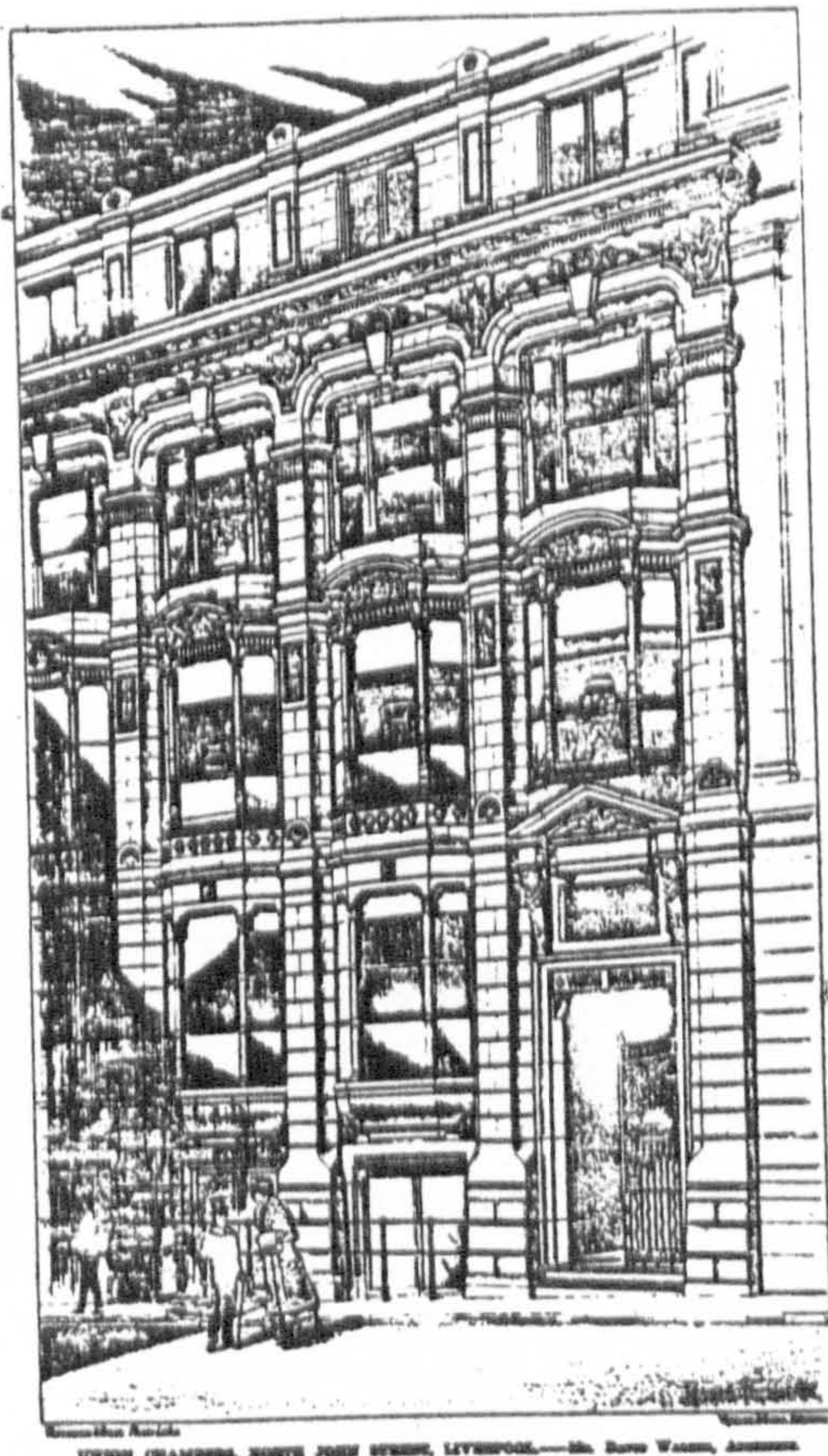
OLIVES BUILDINGS, Manchester, 1869

OFFICES, Manchester, 1880

5-70



PREMISES MARKET ST MANCHESTER
HARDHALL & LITTLEWOOD ARCHTDS



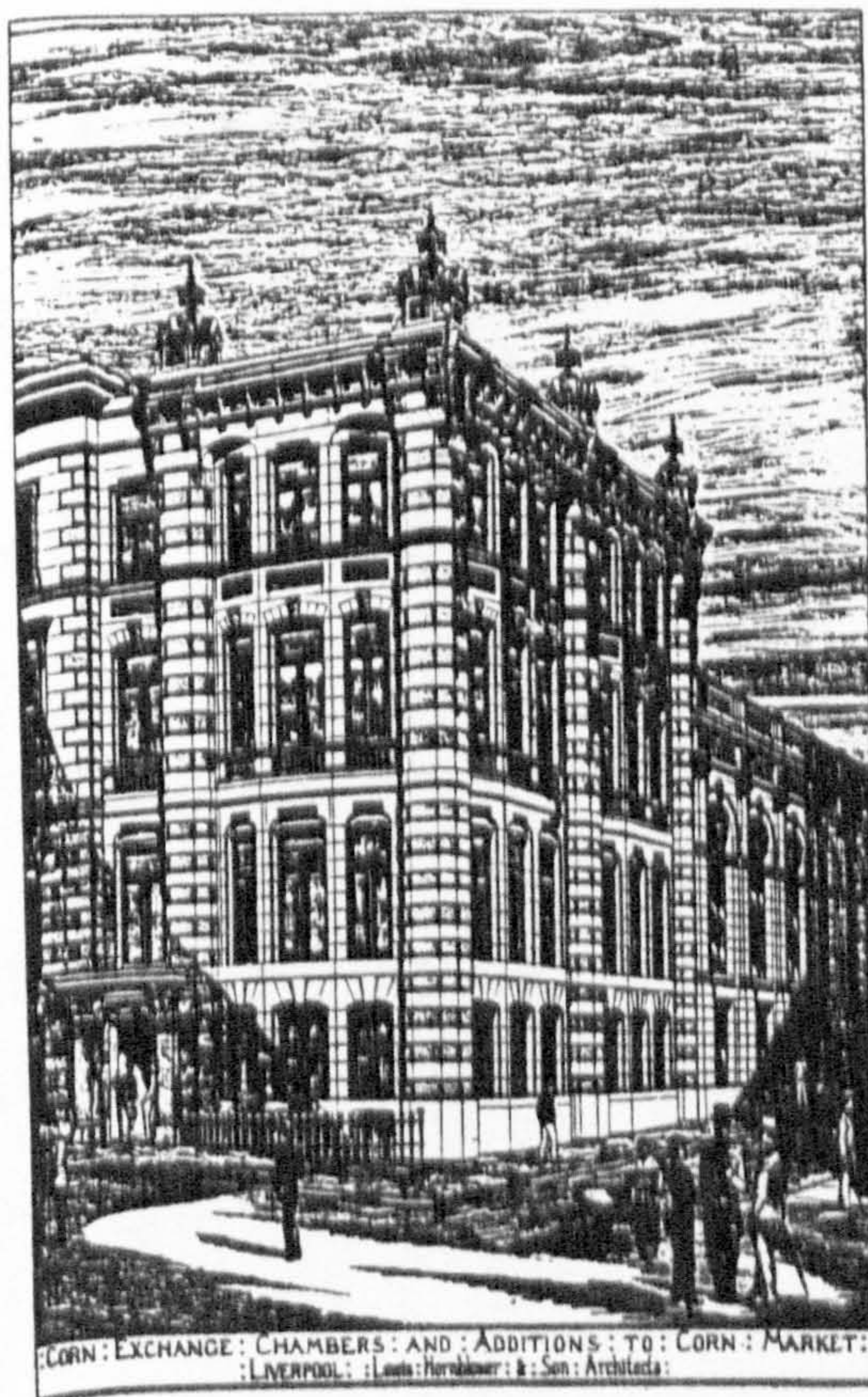
UNION CHAMBERS, NORTH JOHN STREET, LIVERPOOL.—MR. ROSS WATSON, ARCHT.

5-71

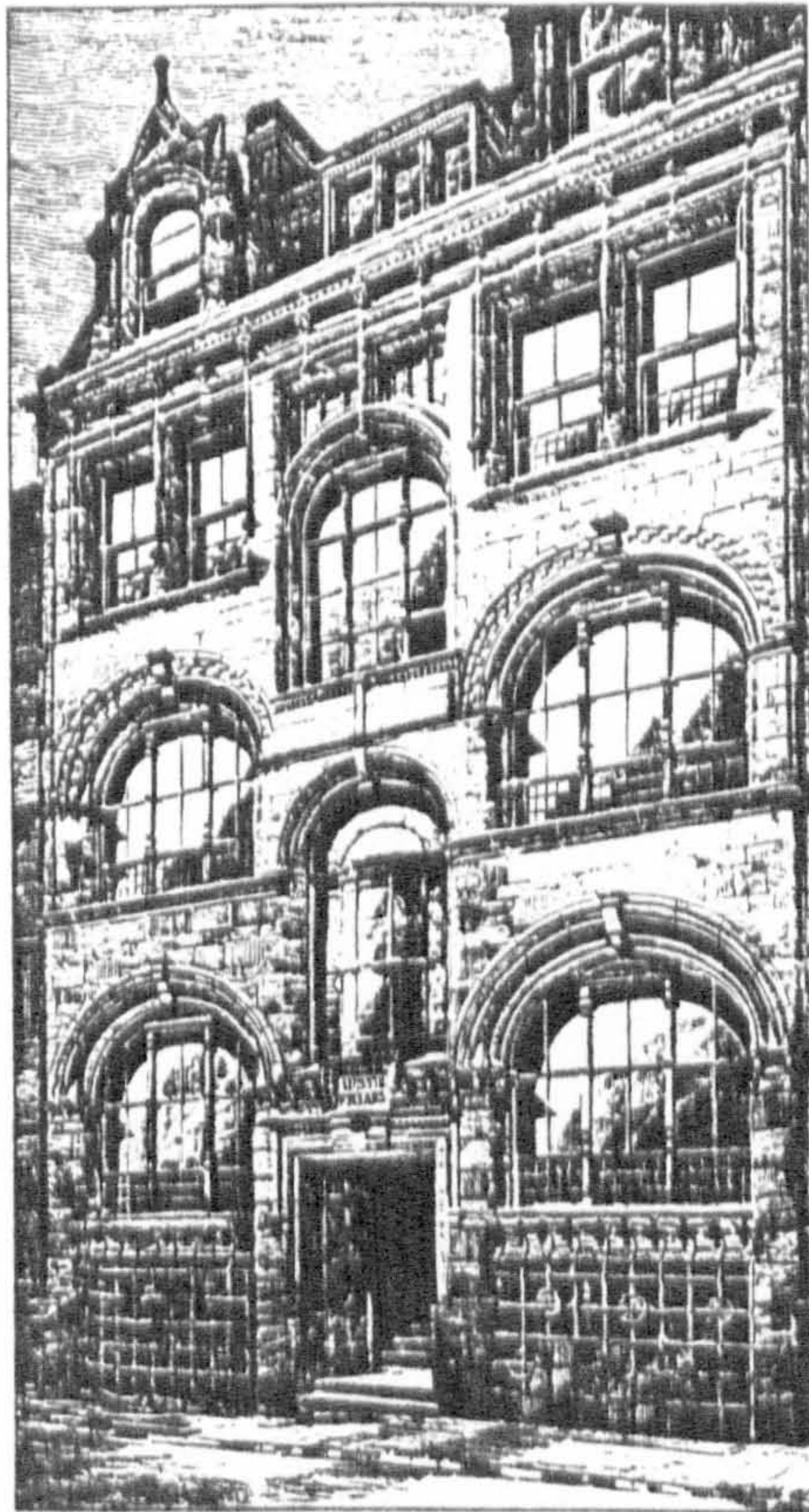
UNION CHAMBERS, Liverpool, 1881

CORN EXCHANGE CHAMBERS, Liverpool, 1885

5-72



CORN EXCHANGE CHAMBERS AND ADDITIONS TO CORN MARKET:
LIVERPOOL: LEWIS HERRICKMAN & SON ARCHT.



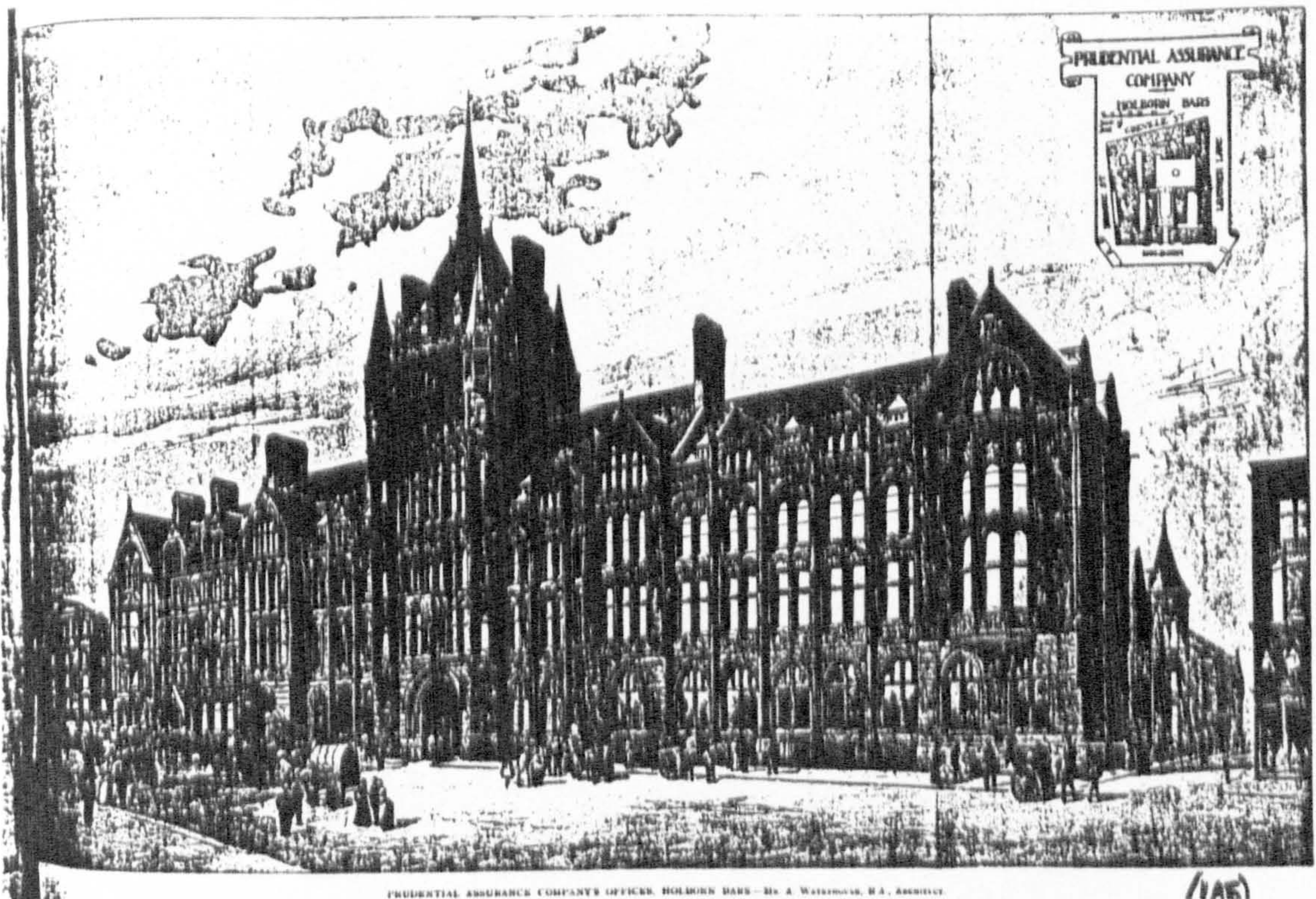
OFFICES - AUSTIN-FRIARS - EC - ASTON WEBB - FRISA ARCHT

5-73

OFFICES, City, 1889

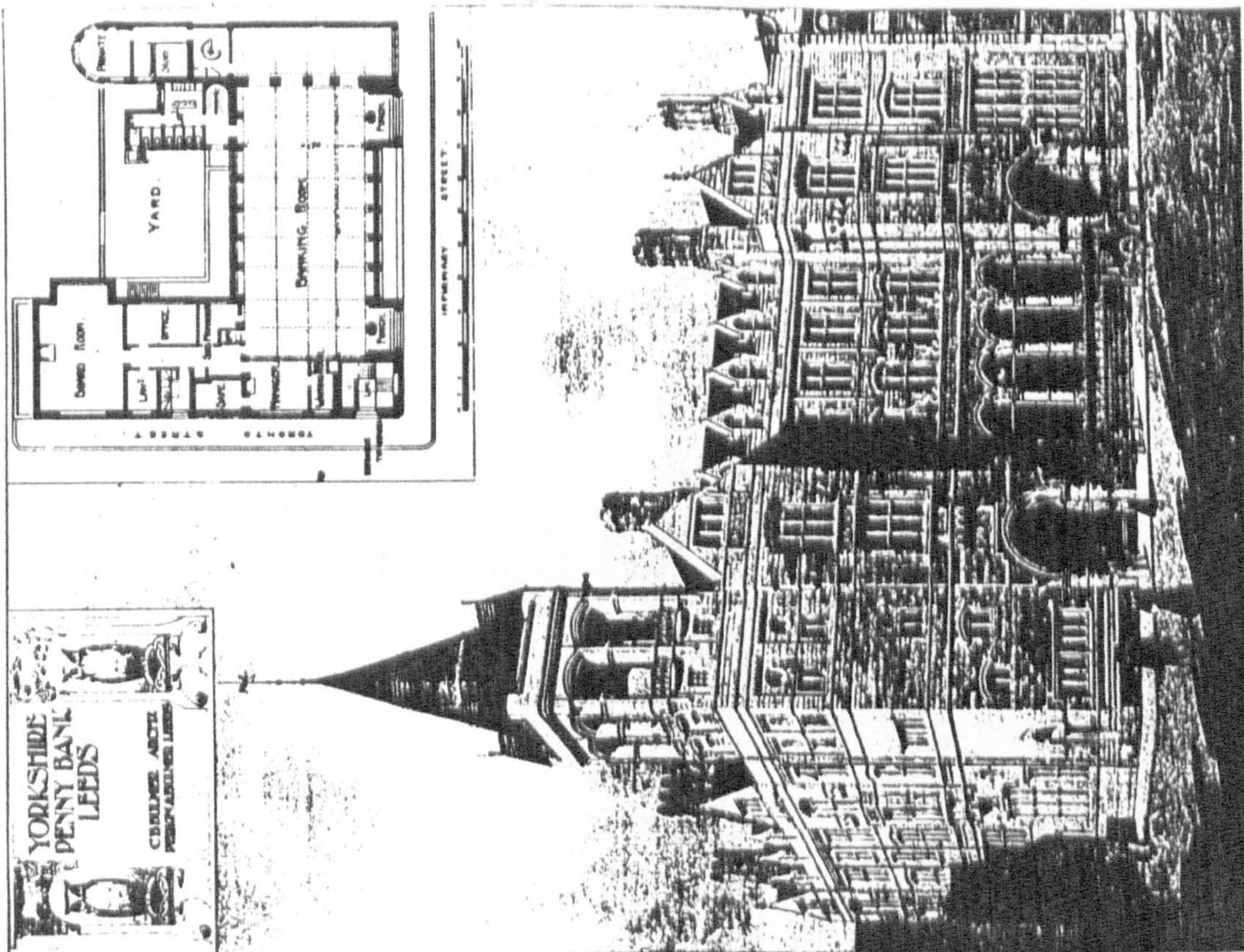
PRUDENTIAL ASSURANCE CO., City, 1899

5-74

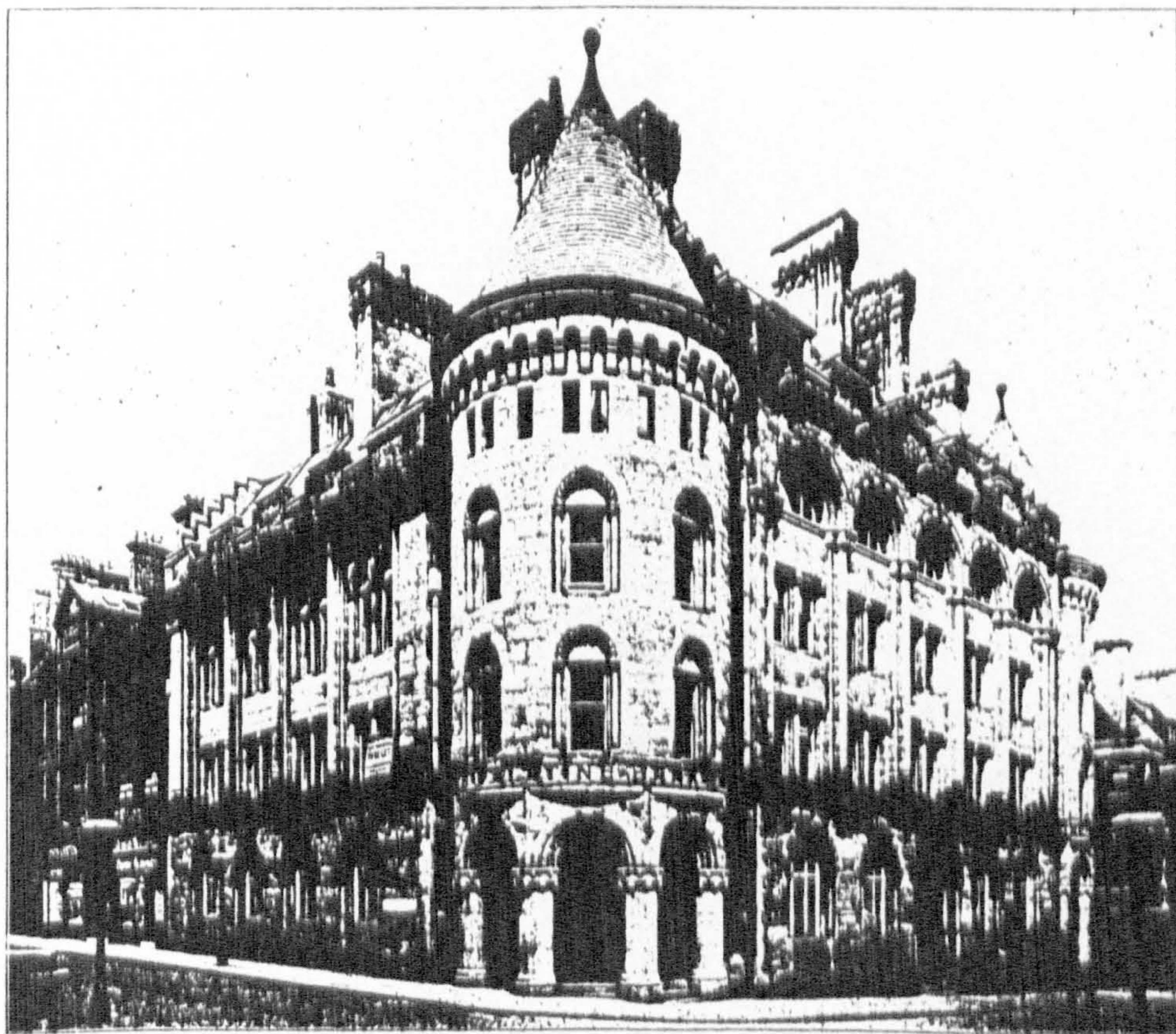


PRUDENTIAL ASSURANCE COMPANY'S OFFICES, HOLBORN LONDON - H. A. WATKINS, R.A., ARCHT

(1A5)



5-75
 YORKSHIRE PENNY BANK, Leeds, 1905
 PALATINE BANK, Manchester, 1910
 5-76



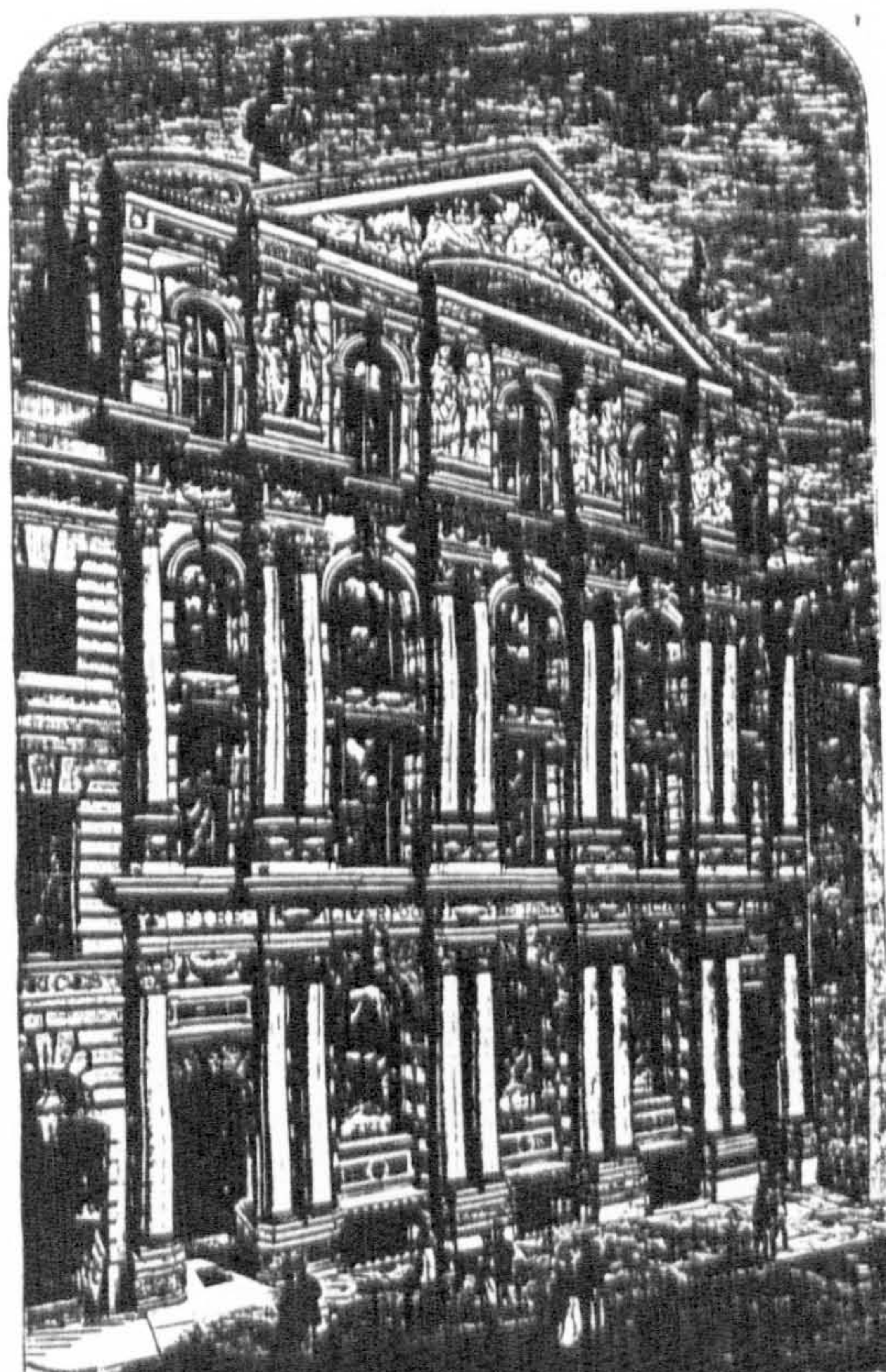


5-77

SOVEREIGN LIFE OFFICE, Westminster, 1857
 PROMOTER FIRE AND LIFE OFFICE, City, 1860

5-78



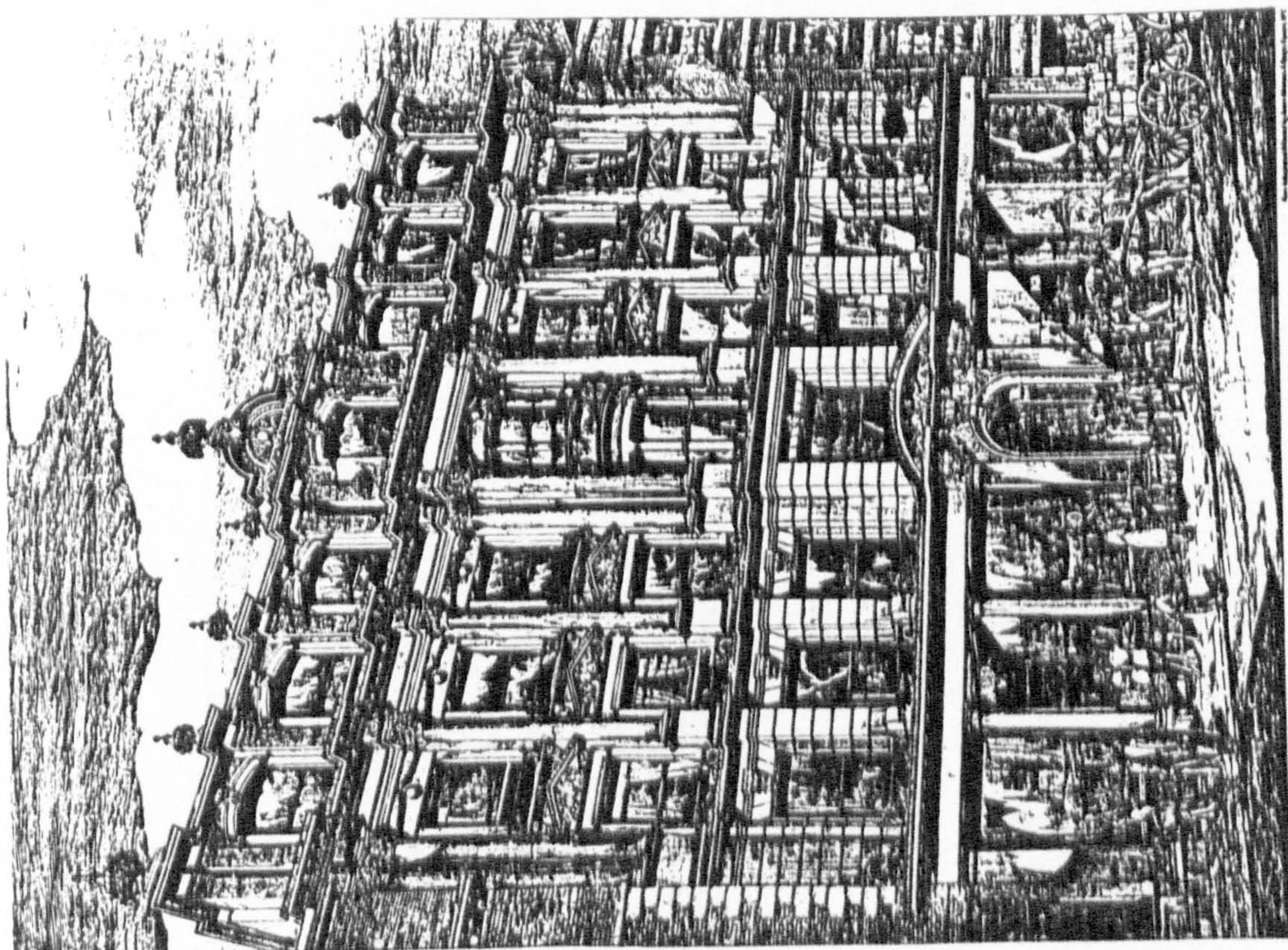


BRISTOL OFFICES OF THE LIVERPOOL AND LONDON INSURANCE COMPANY.
 MR. W. BRUCE OWEN, ARCHT.

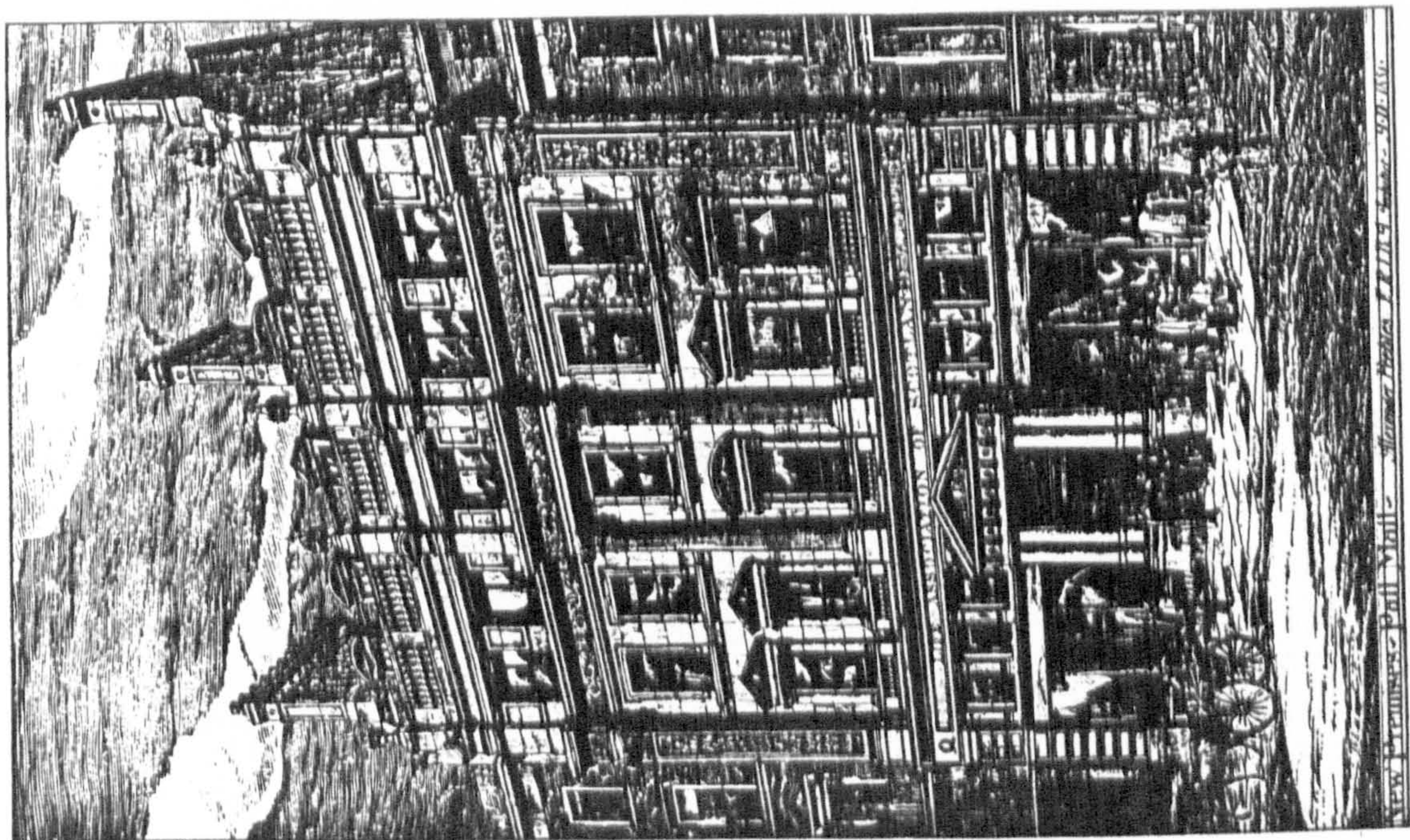
5-79

LIVERPOOL AND LONDON INSURANCE CO., Bristol, 1870
 LEADENHALL HOUSE, City, 1879

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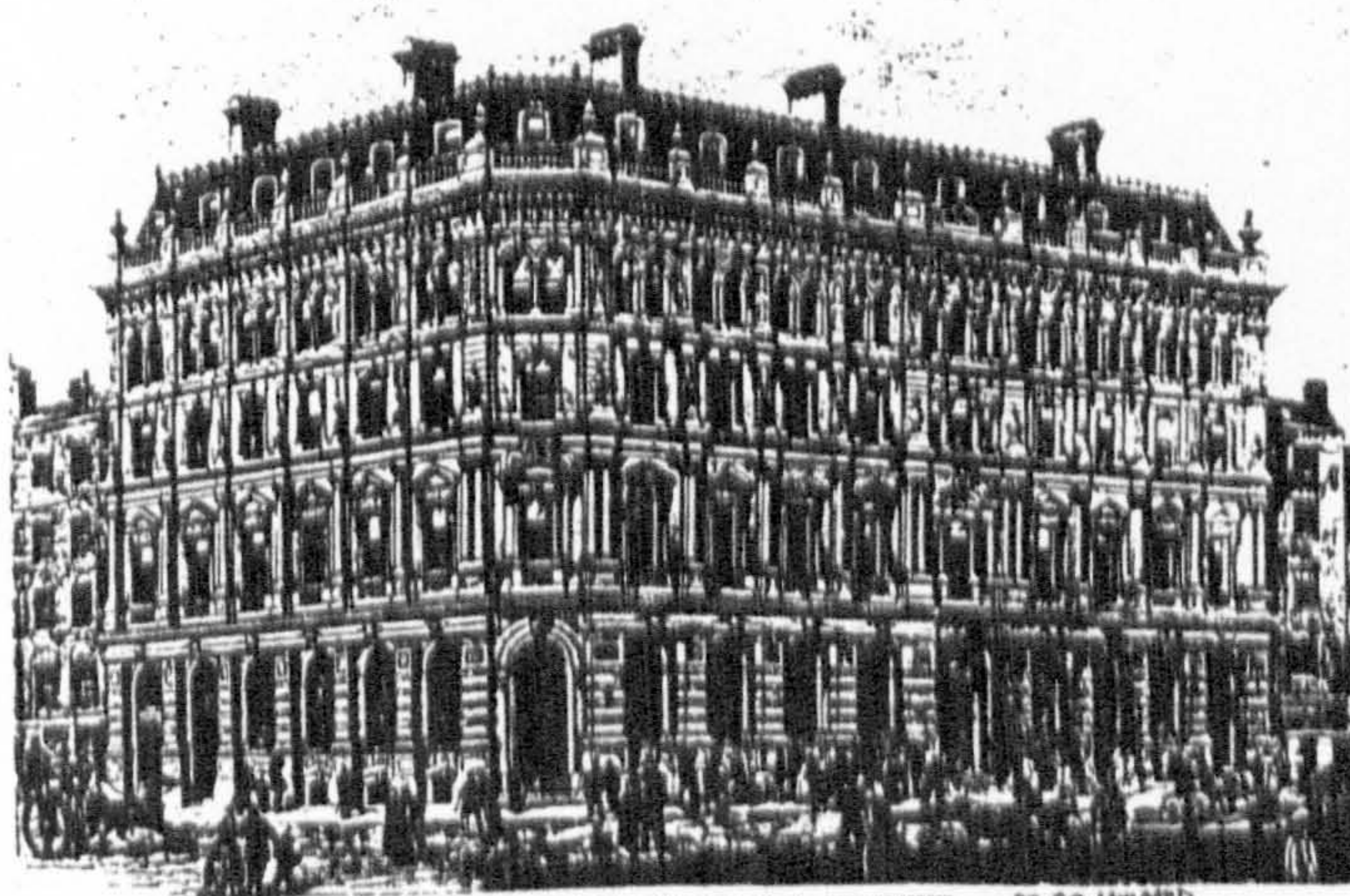
LEADENHALL HOUSE 88-90 LEADENHALL STREET, E.C. 3. 1879. 1879.



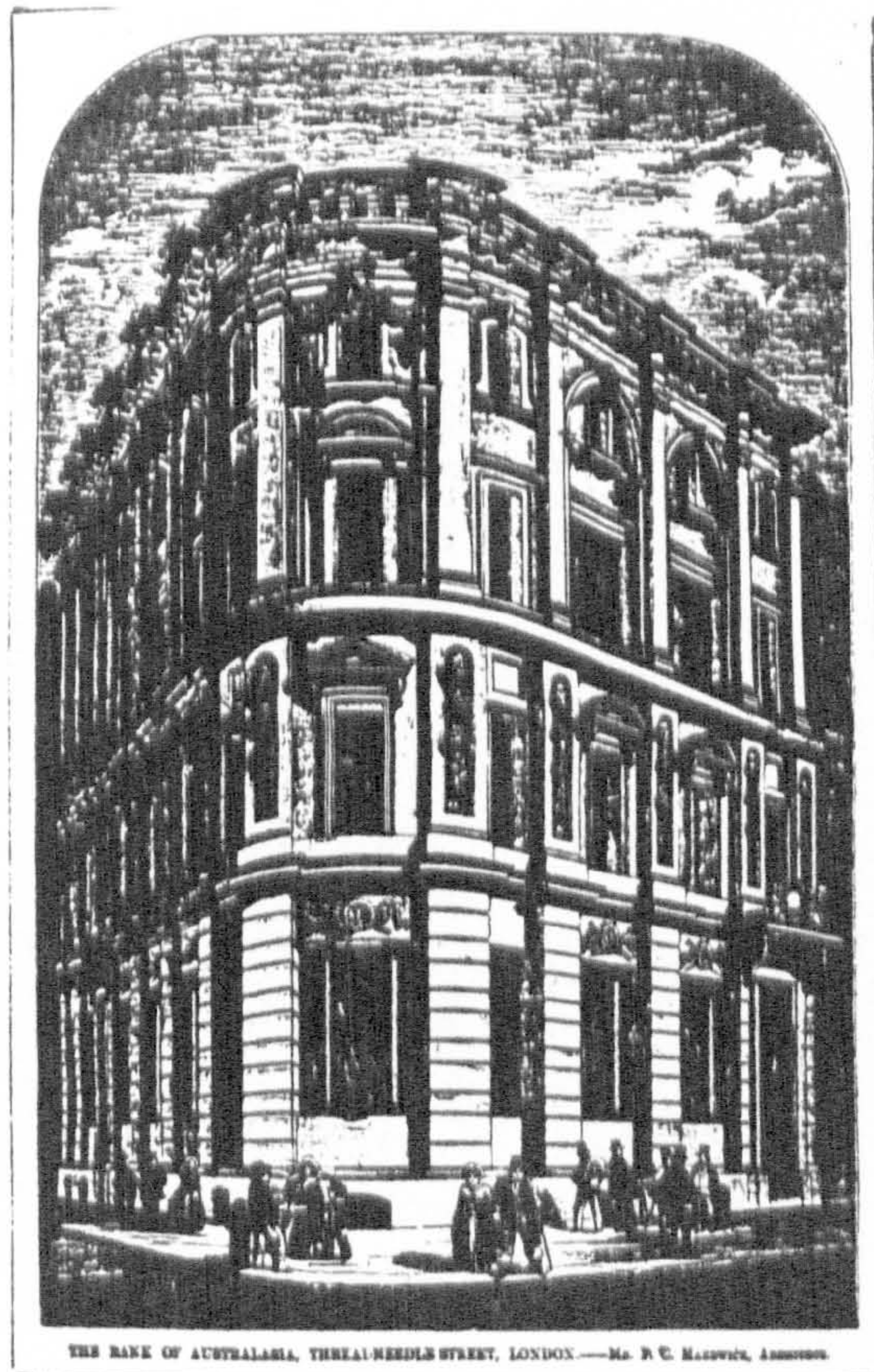
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LIFE ASSOCIATION OF SCOTLAND, Westminster, 1881
37-39 LOMBARD STREET, City, 1867

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NEW BUILDING OF THE CITY OF LONDON COMPANY, LOMBARD-STREET. J. G. THOMPSON

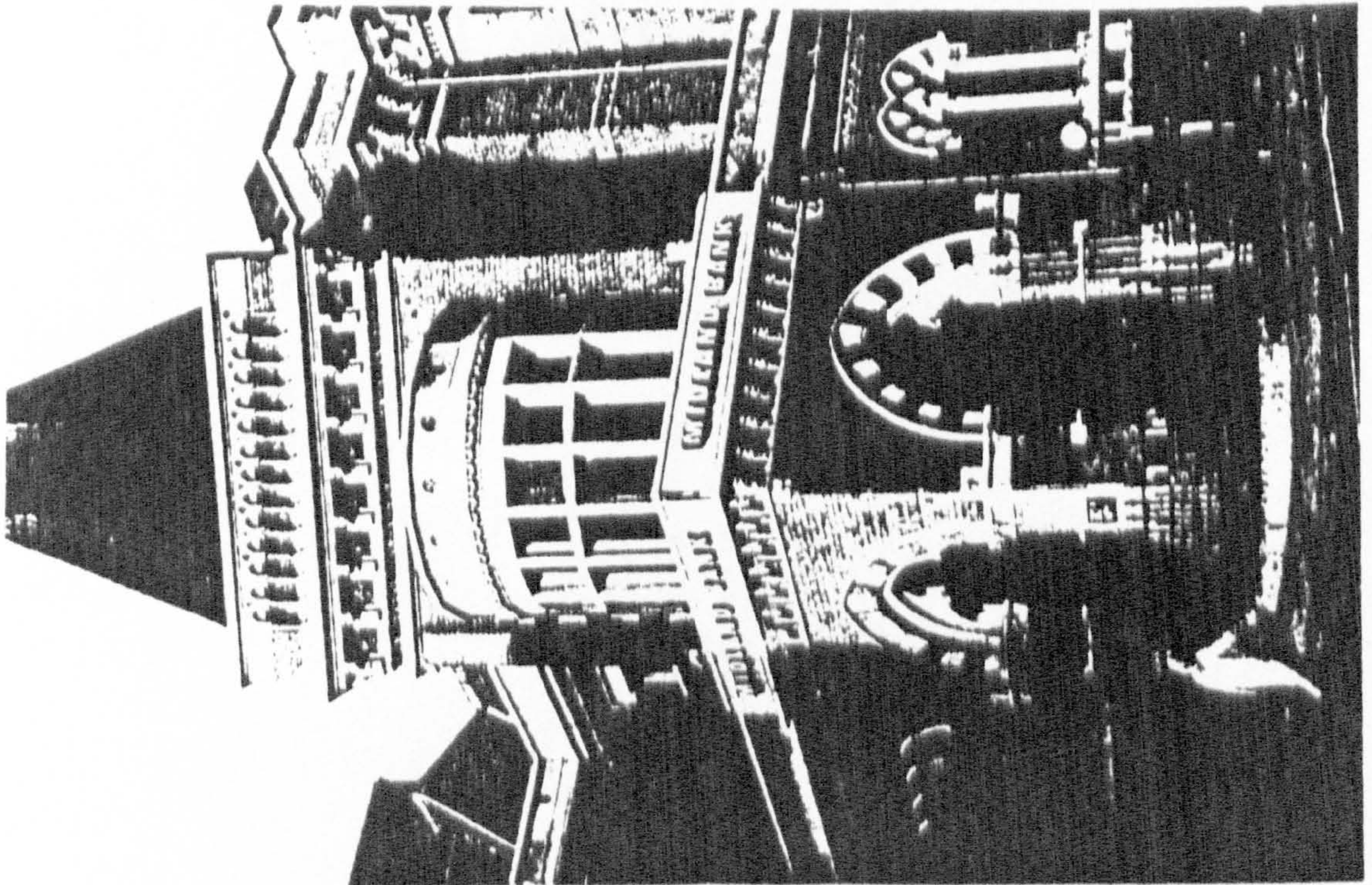


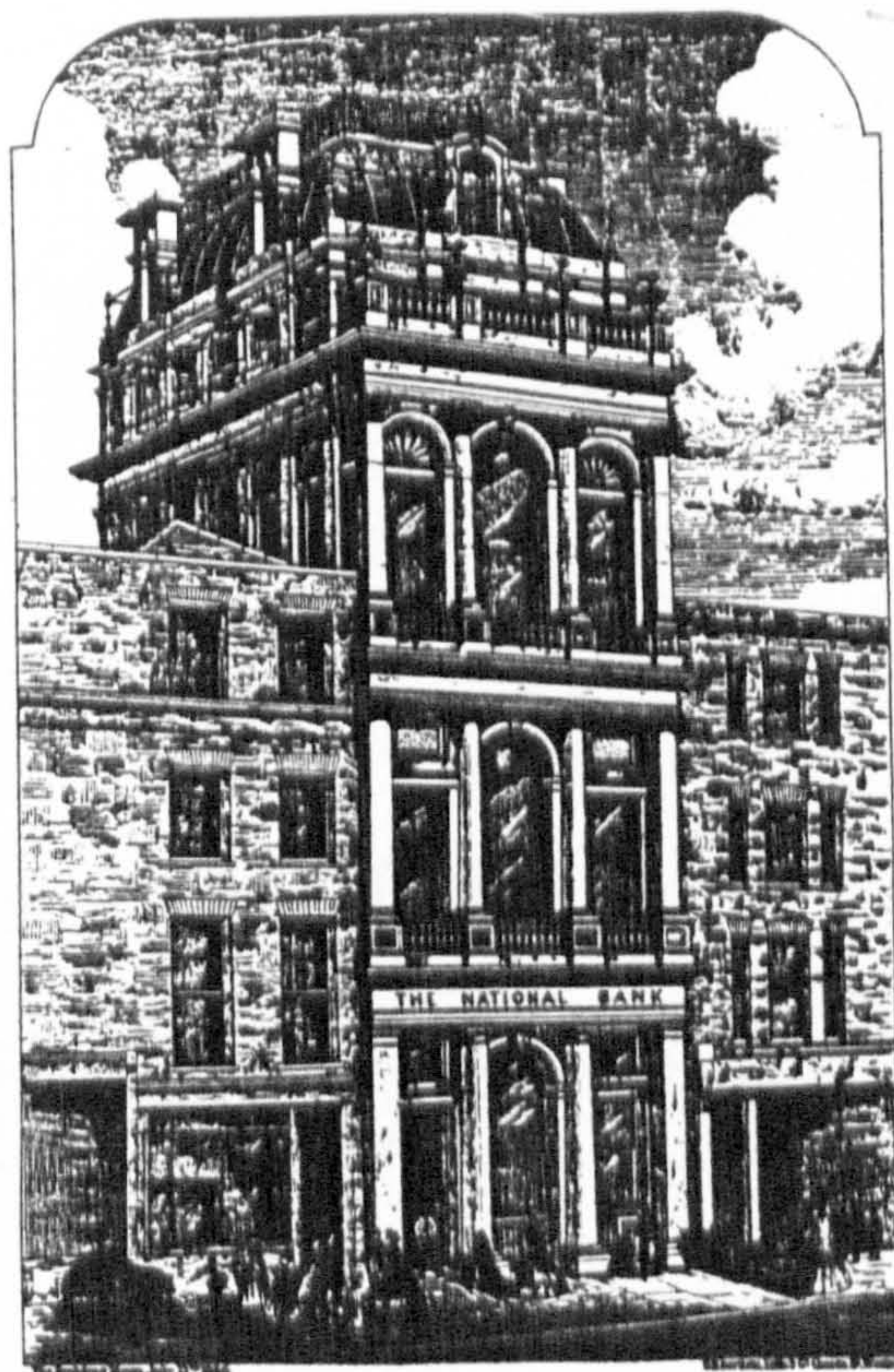
THE BANK OF AUSTRALASIA, THREAD-NEDDLE STREET, LONDON.—MR. R. C. HARRISON, ARCHT.

5-83

BANK OF AUSTRALASIA, City, 1855
LEICESTERSHIRE BANKING CO., Leicester, 1869

5-84



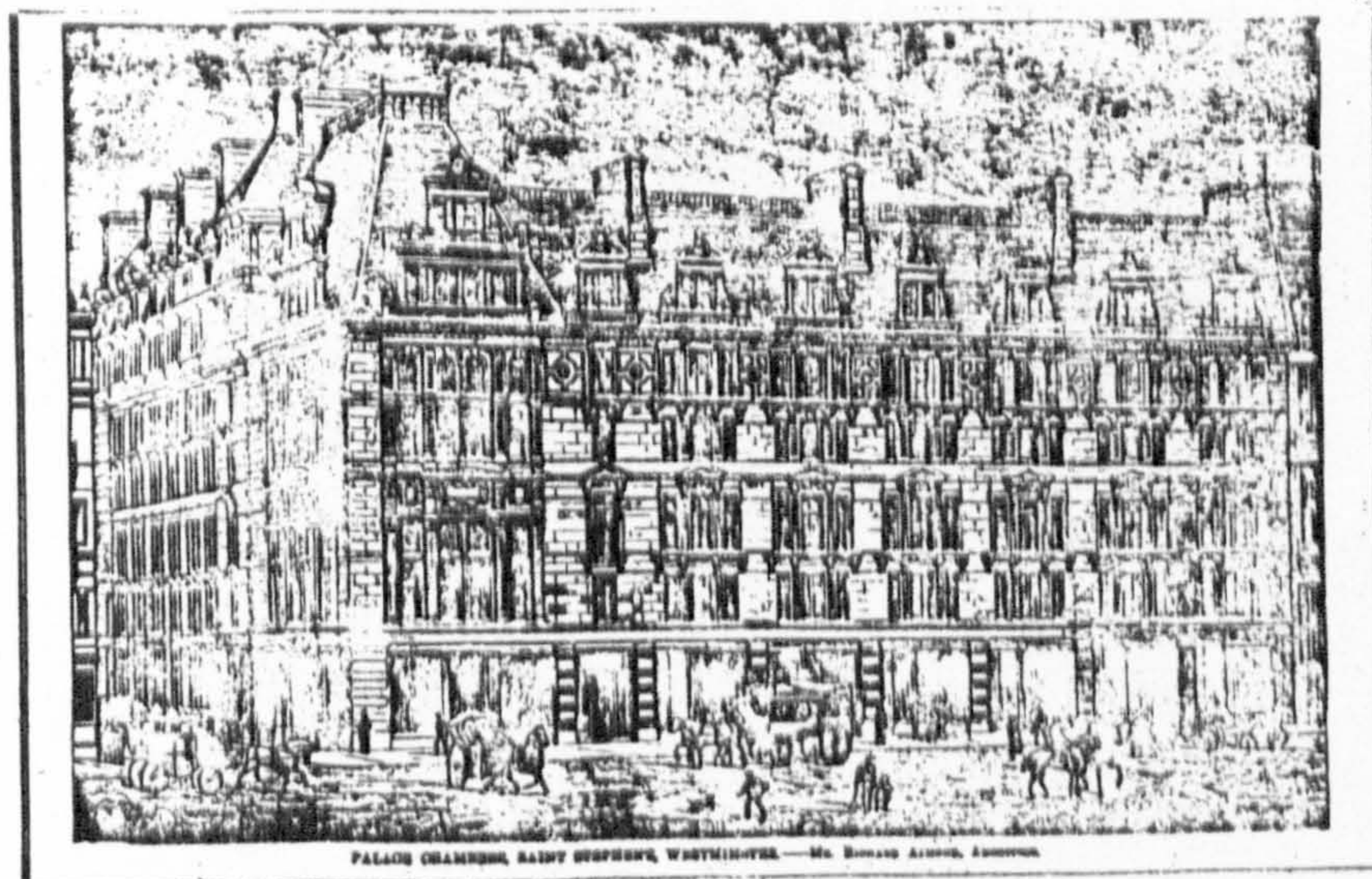


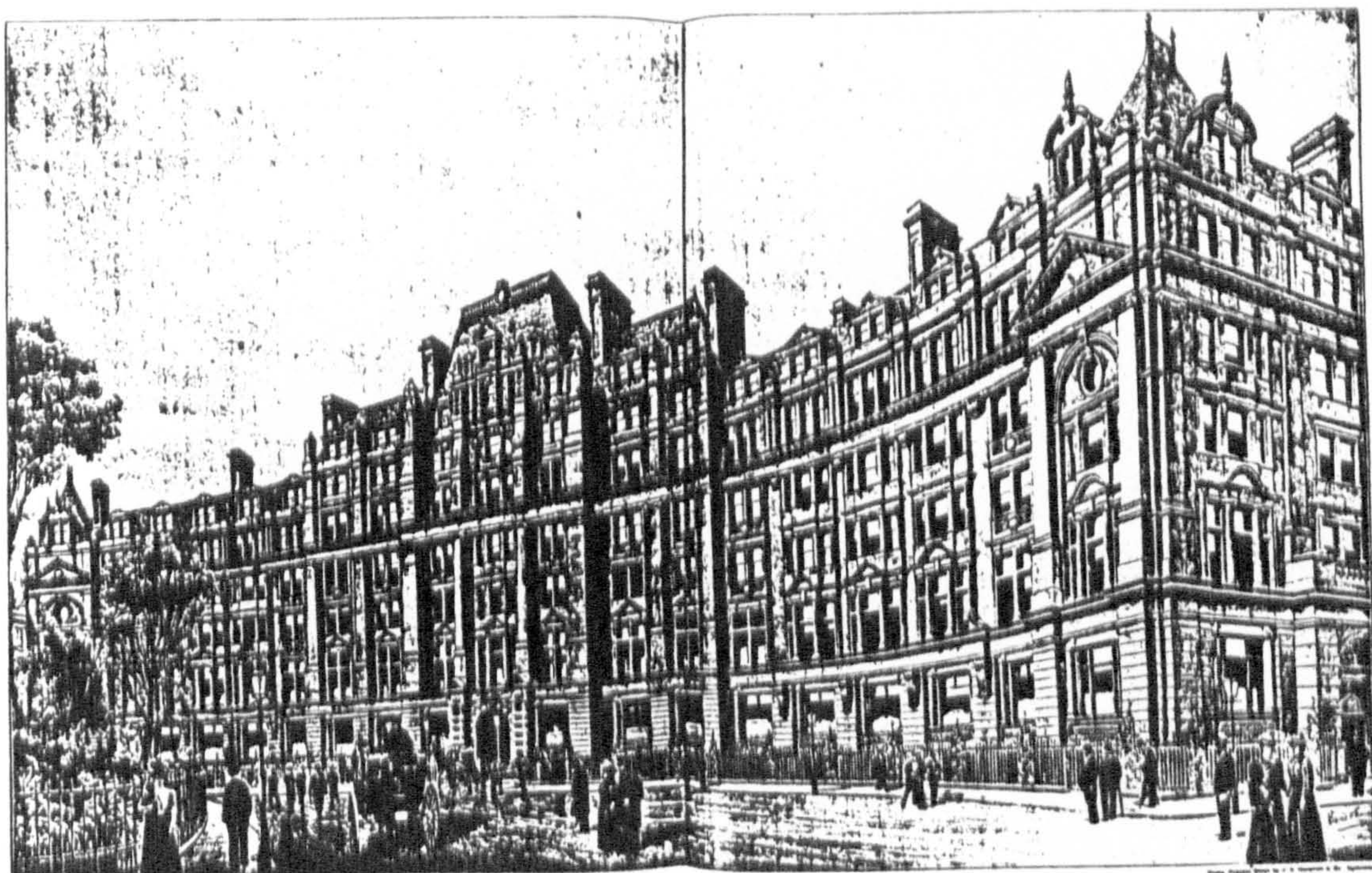
THE NATIONAL BANK CHARING CROSS JESSY NELSON & INNESS, ARCHT.

5-85

NATIONAL BANK, Westminster, 1866
PALACE CHAMBERS, Westminster, 1878

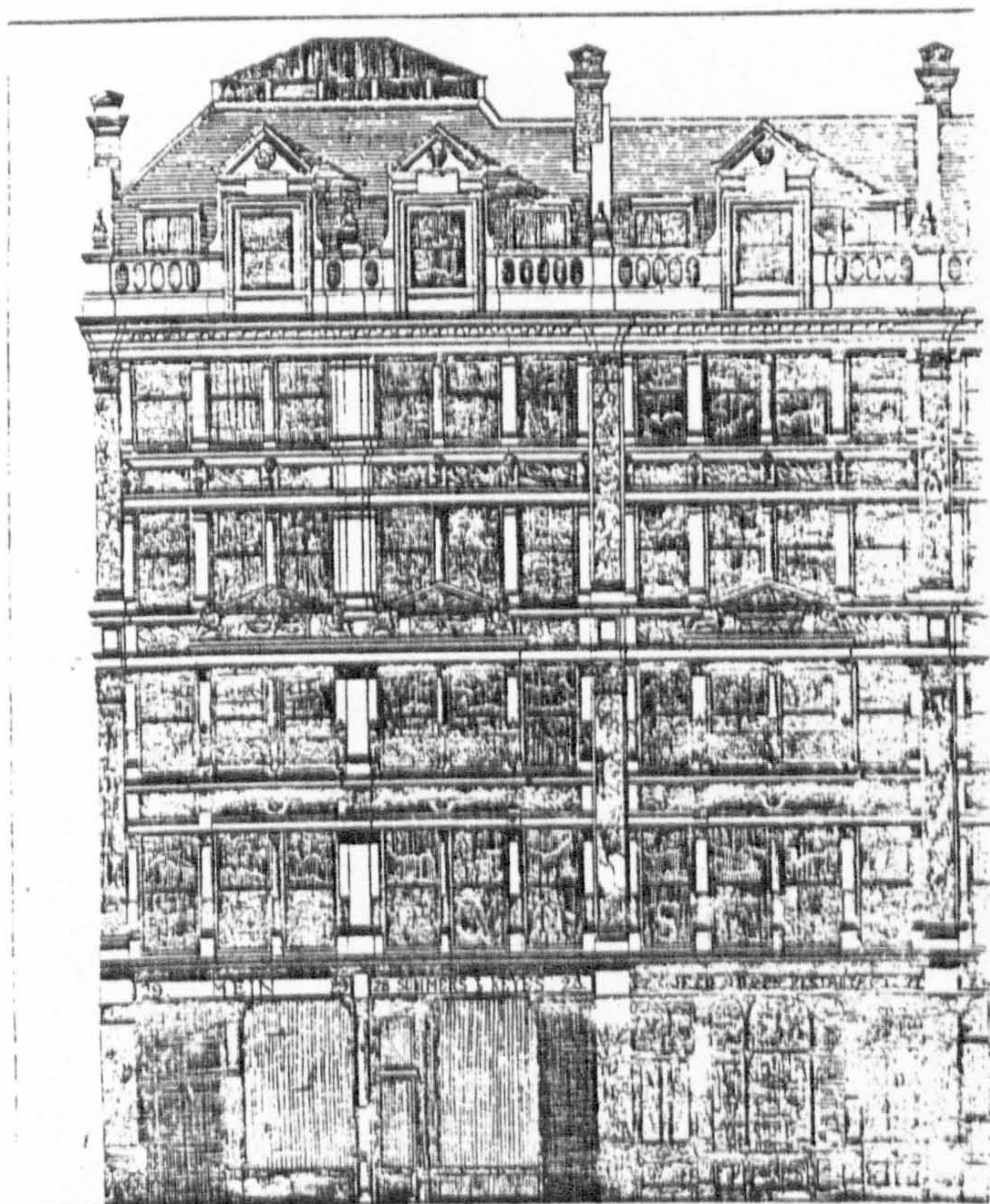
5-86



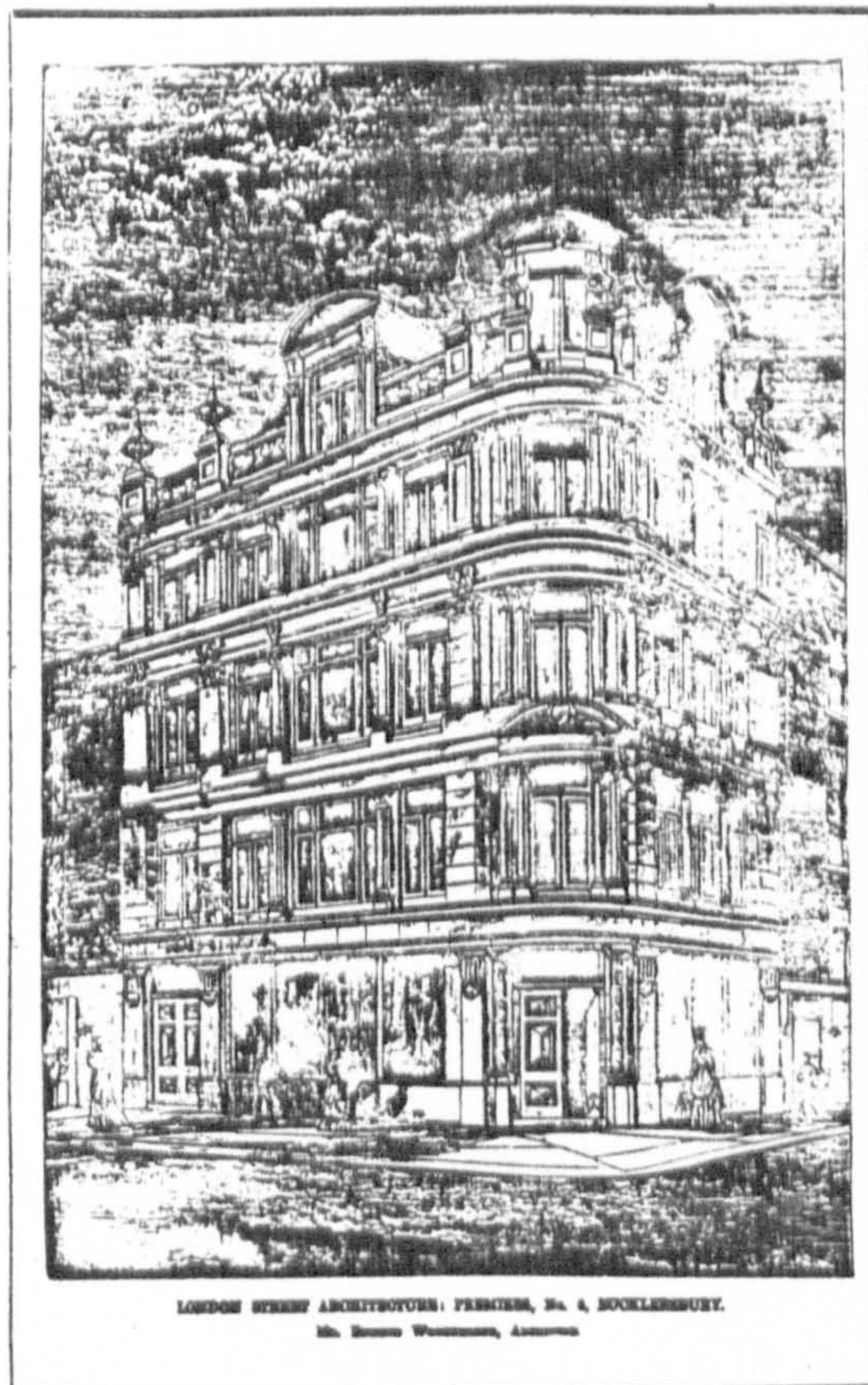


SALISBURY HOUSE, FINSBURY CIRCUS, E.C.
HERBERT DAVID AND EMANUEL, ARCHITECTS

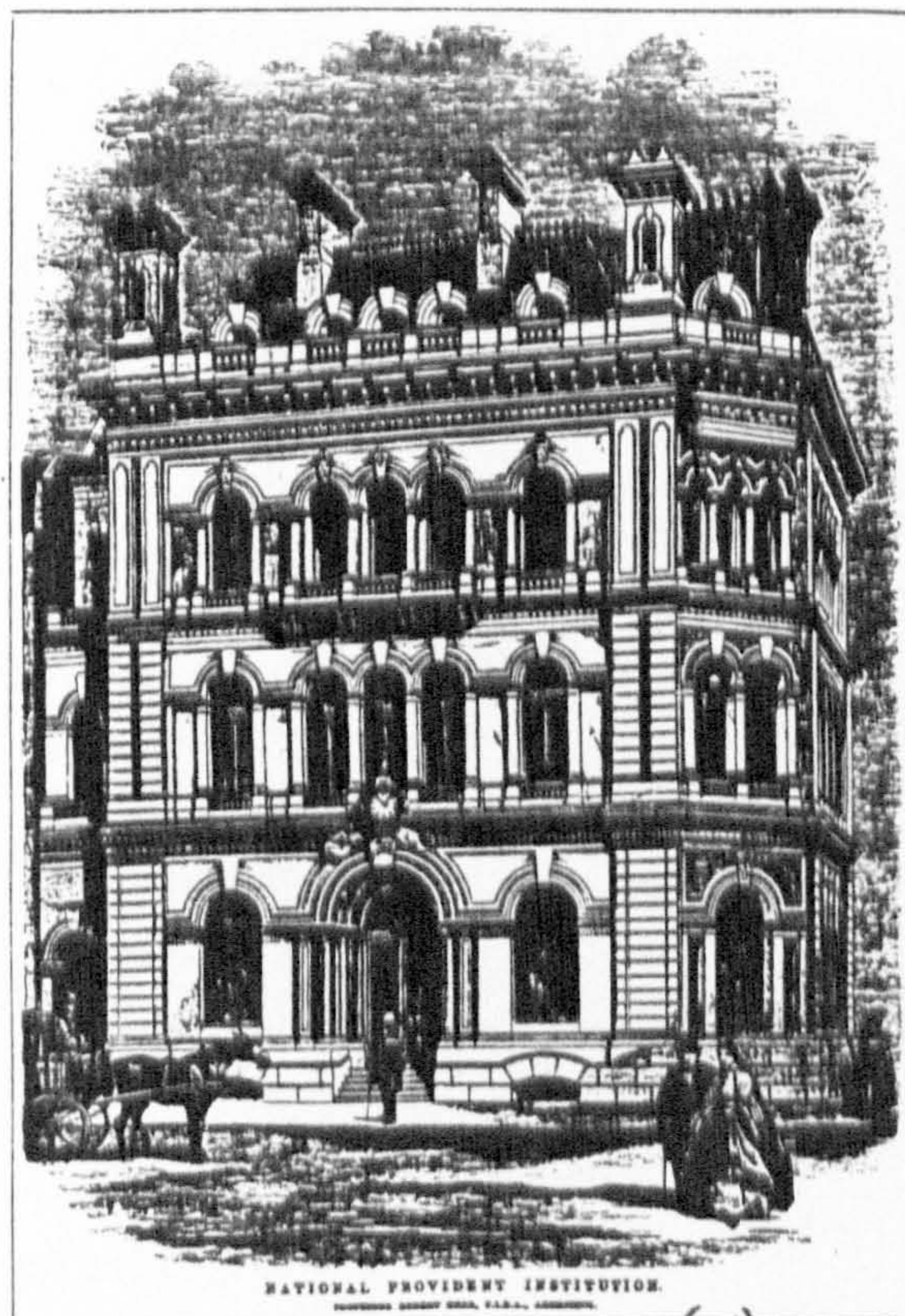
5-87
SALISBURY HOUSE, City, 1900
23-30 CHEAPSIDE, City, 1880
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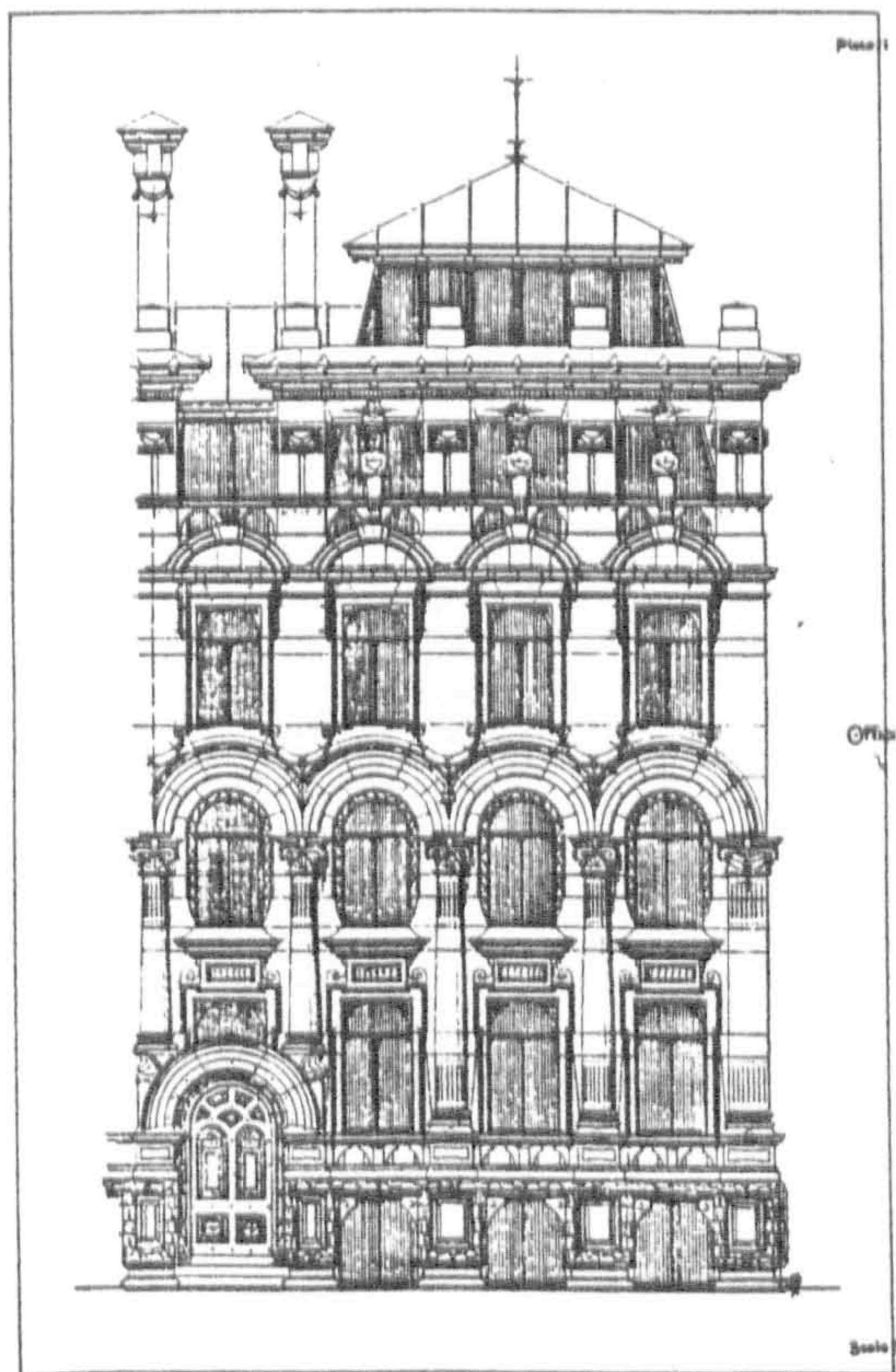


LONDON STREET ARCHITECTURE: SHOPS AND OFFICES, Nos. 23 to 30, CHEAPSIDE.

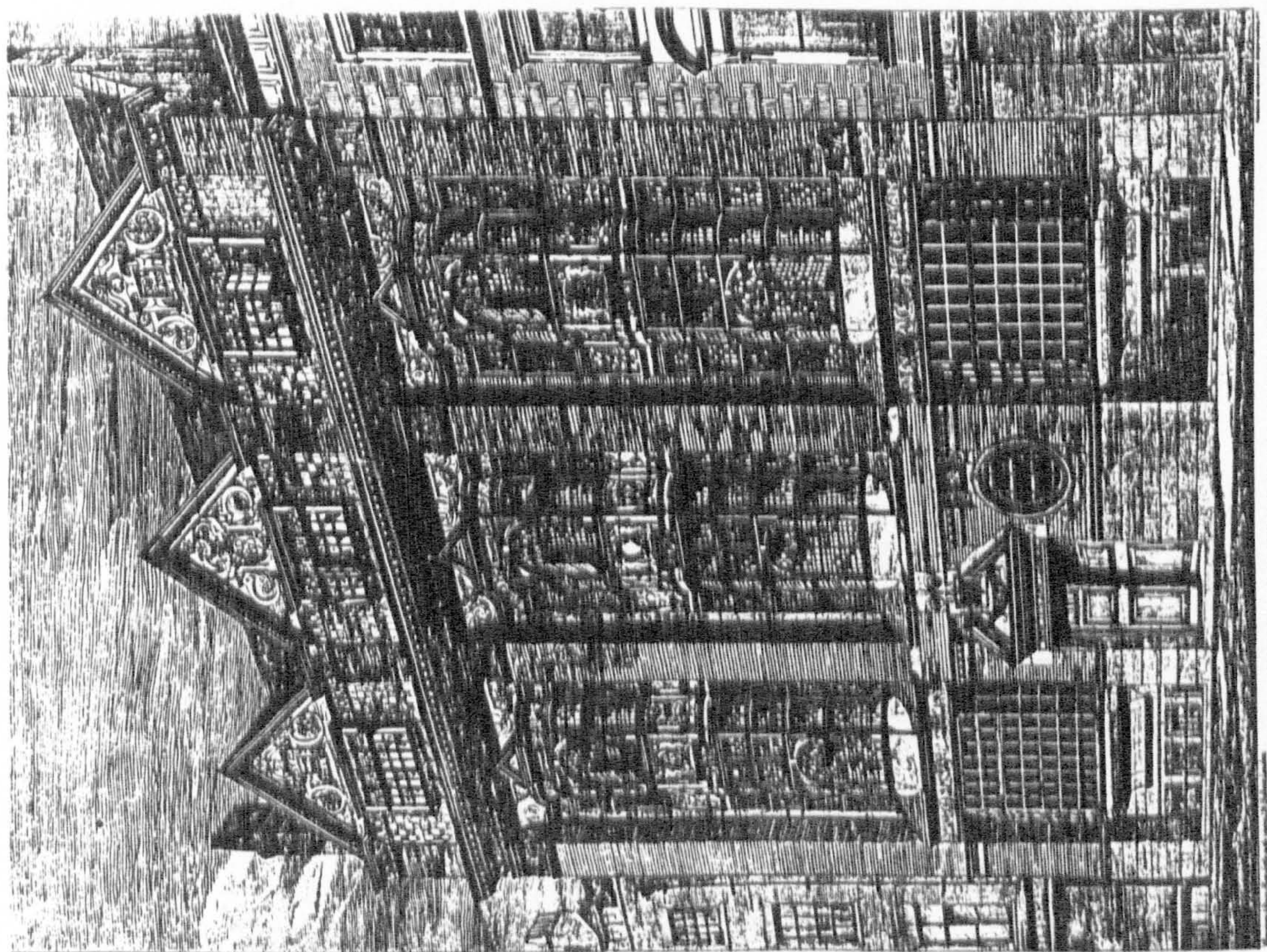


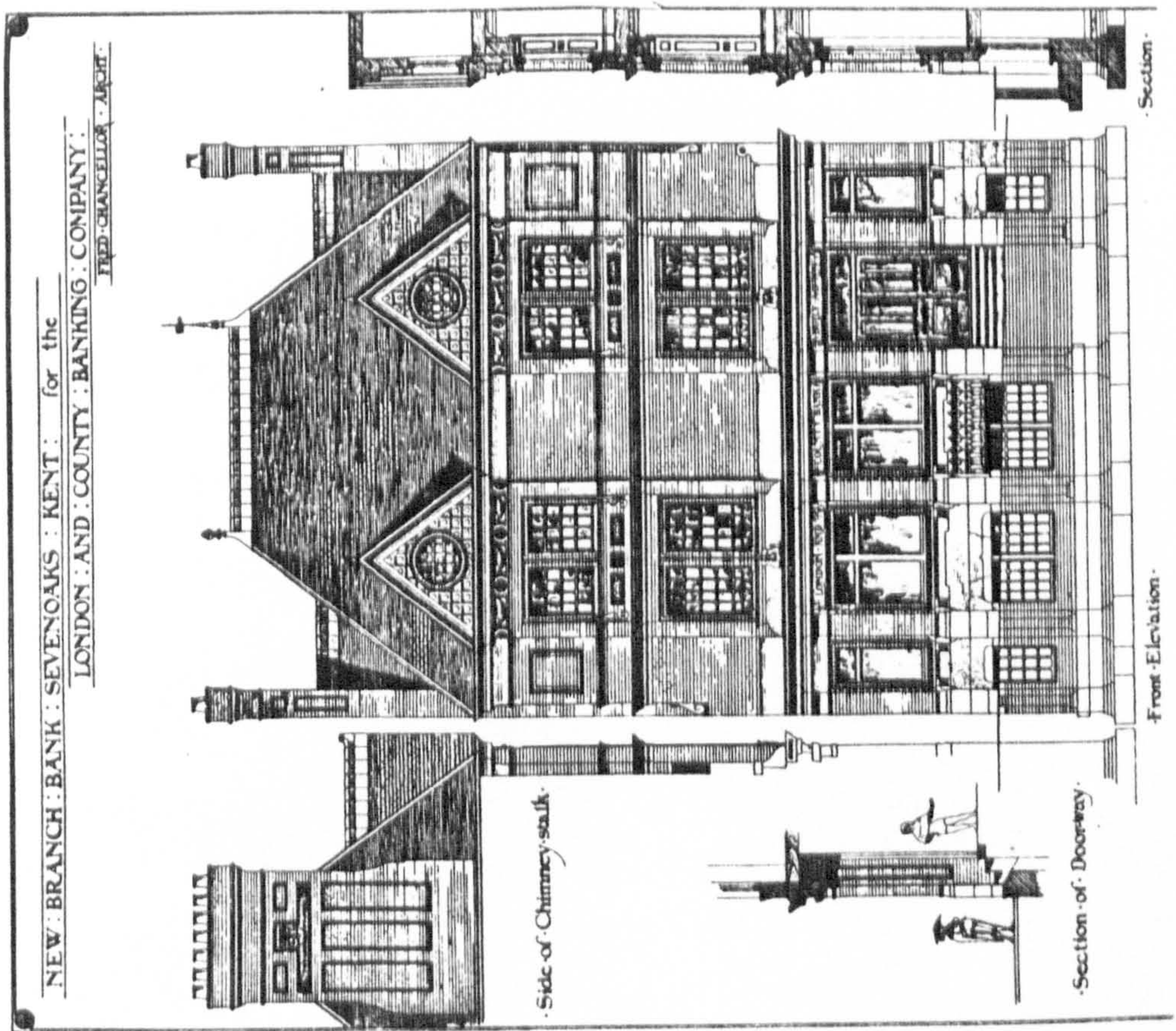
5-89
 8 BUCKLESBURY, City, 1877
 NATIONAL PROVIDENT INSTITUTION, City, 1862
 5-90





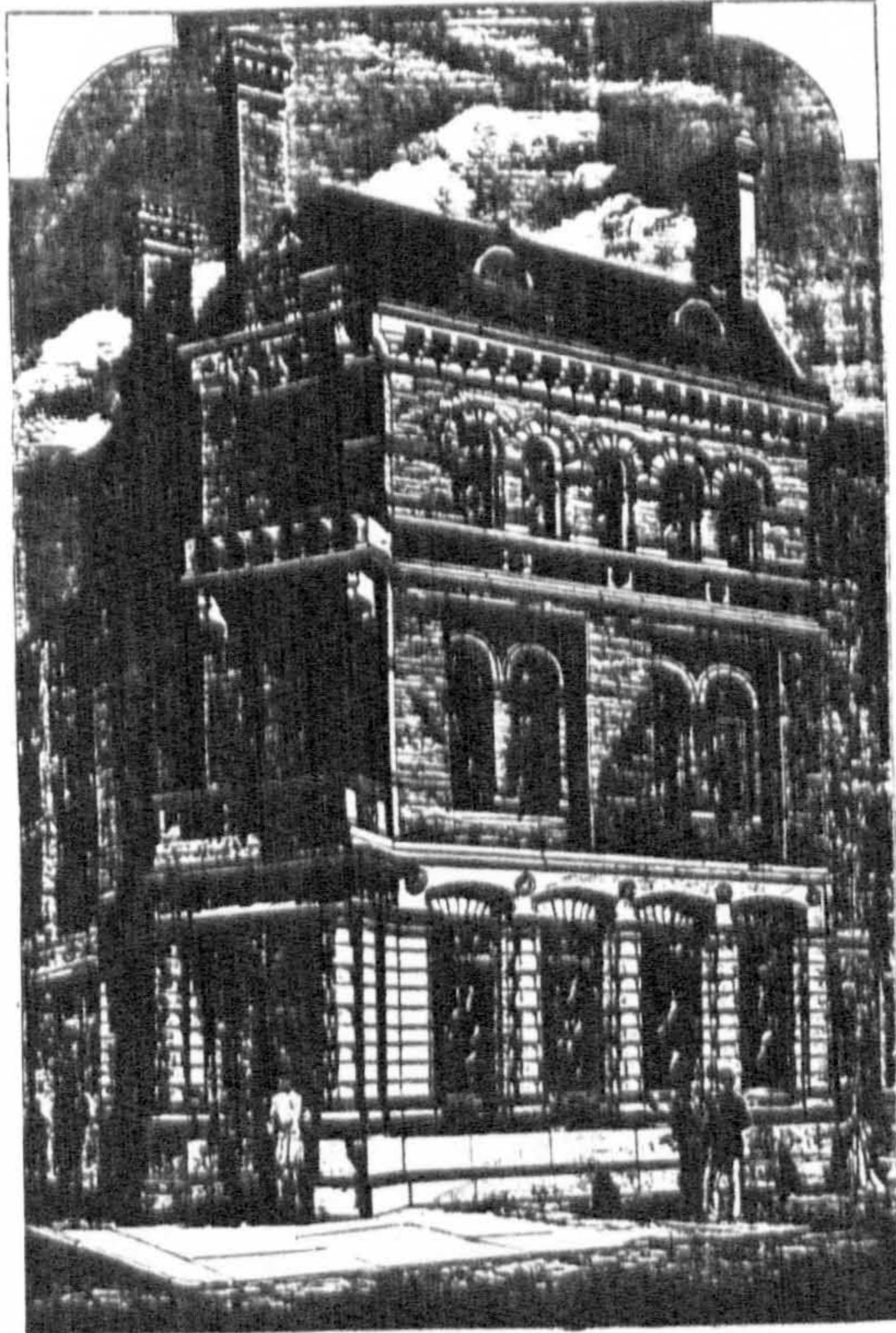
5-91
 OFFICE DESIGN, 1876
 NEW ZEALAND CHAMBERS, City, 1873
 5-92





5-93
LONDON AND COUNTY BANKING CO., Sevenoaks, 1874
QUEEN ANNE CHAMBERS, City, 1875
5-94



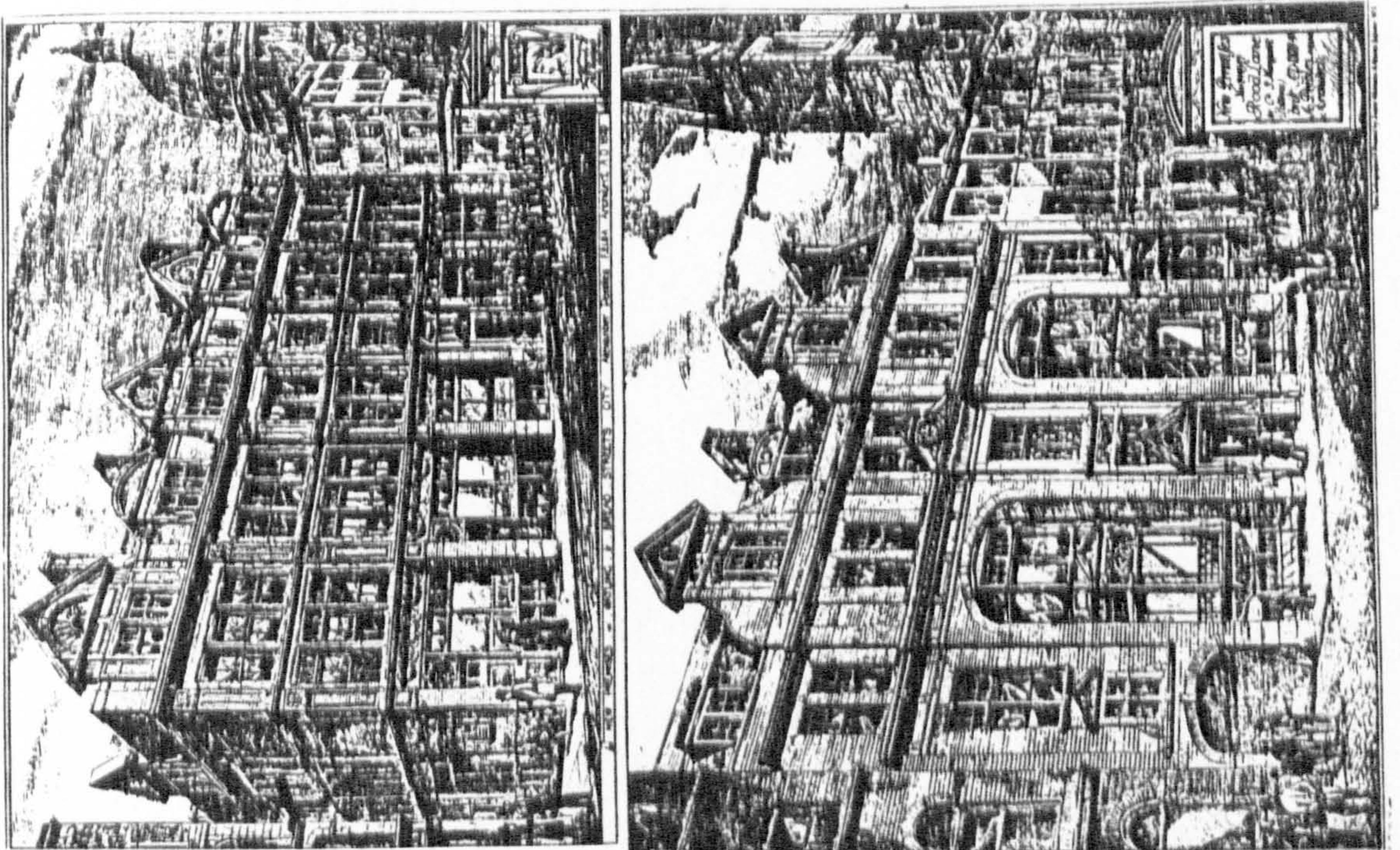


CENTRAL BANK OF LONDON: BRANCH BANK, STAMFORD STREET, BLACKFRIARS ROAD
Messrs. Messrs. H. & W. Messrs. H. & W. Messrs. H. & W. Messrs. H. & W.

5-95

CENTRAL BANK OF LONDON, Southwark, 1875
TWO OFFICE BUILDINGS, City, 1879

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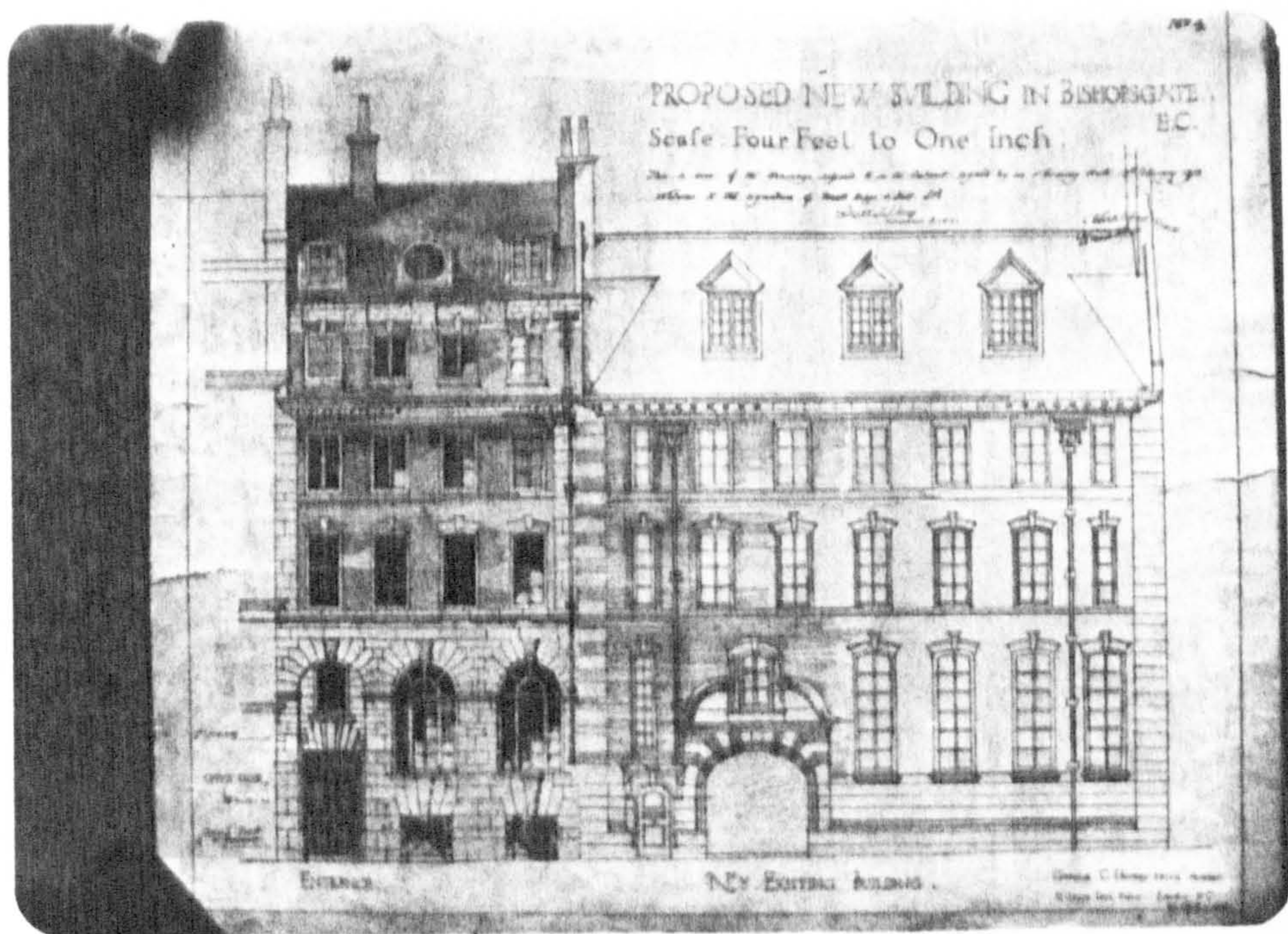
5-97

QUEEN ANNE CHAMBERS, City, 1878
OFFICE BUILDING, City, 1879

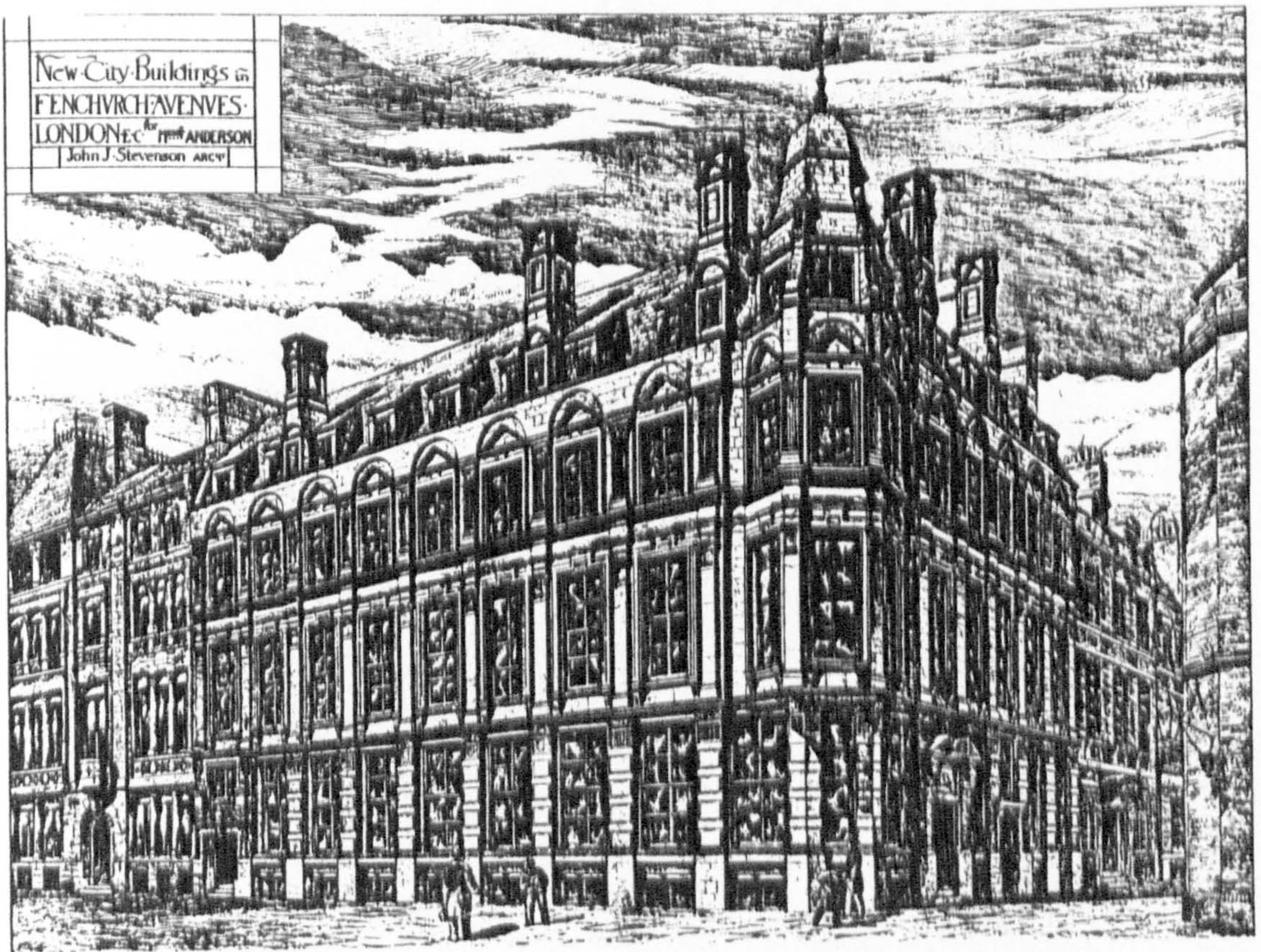
5-98



NEW SHOPS OFFICES AND WAREHOUSES ALDERGATE LONDON E.C. (Design by Henry Wigley & Co. Architects)



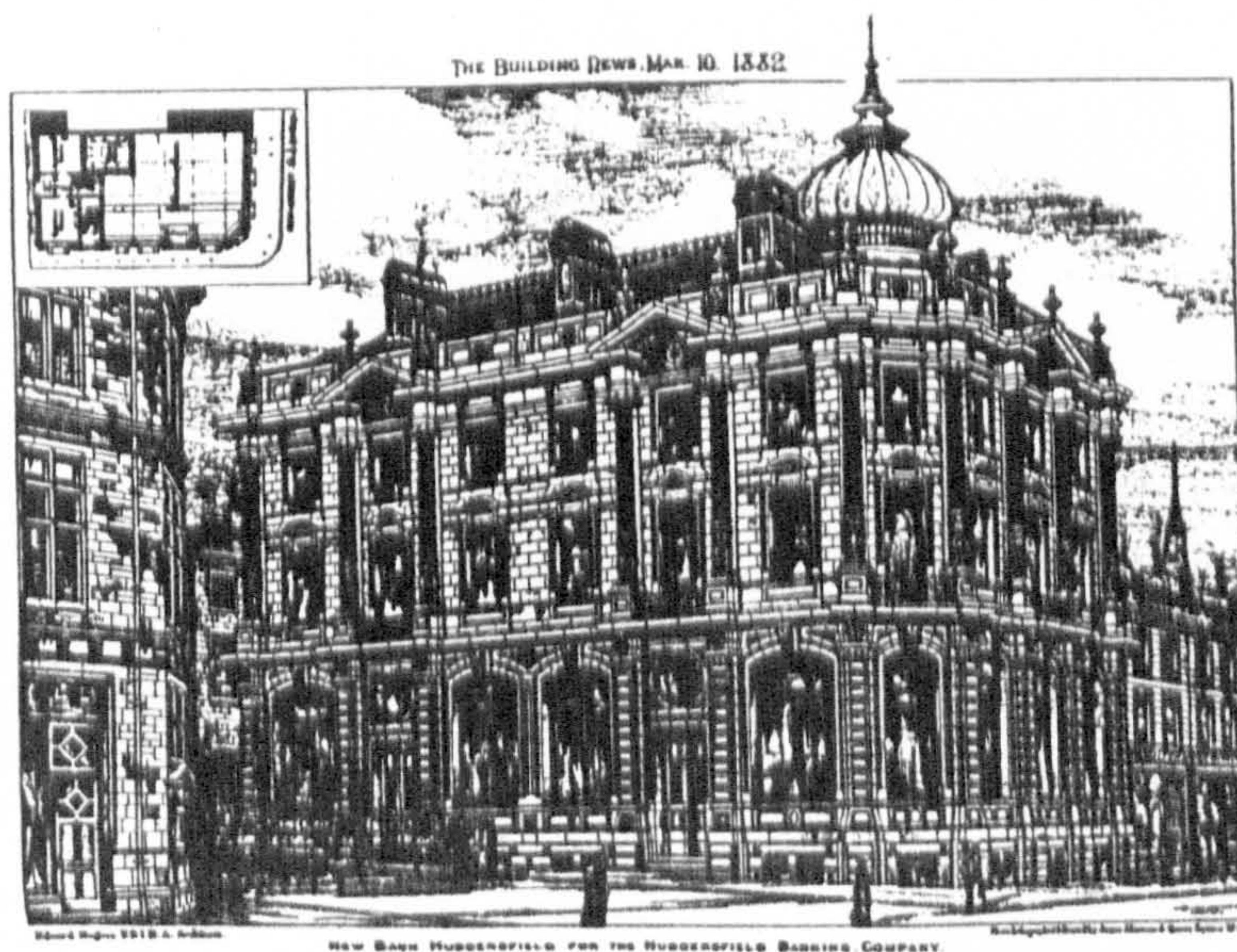
5-99
 BARING BROTHERS BANK, City, 1881
 ANDERSON, ANDERSON AND CO., City, 1878
 5-100





5-101
 OFFICE BUILDING, City, 1885
 54-57 BISHOPSGATE, City, 1892
 5-102

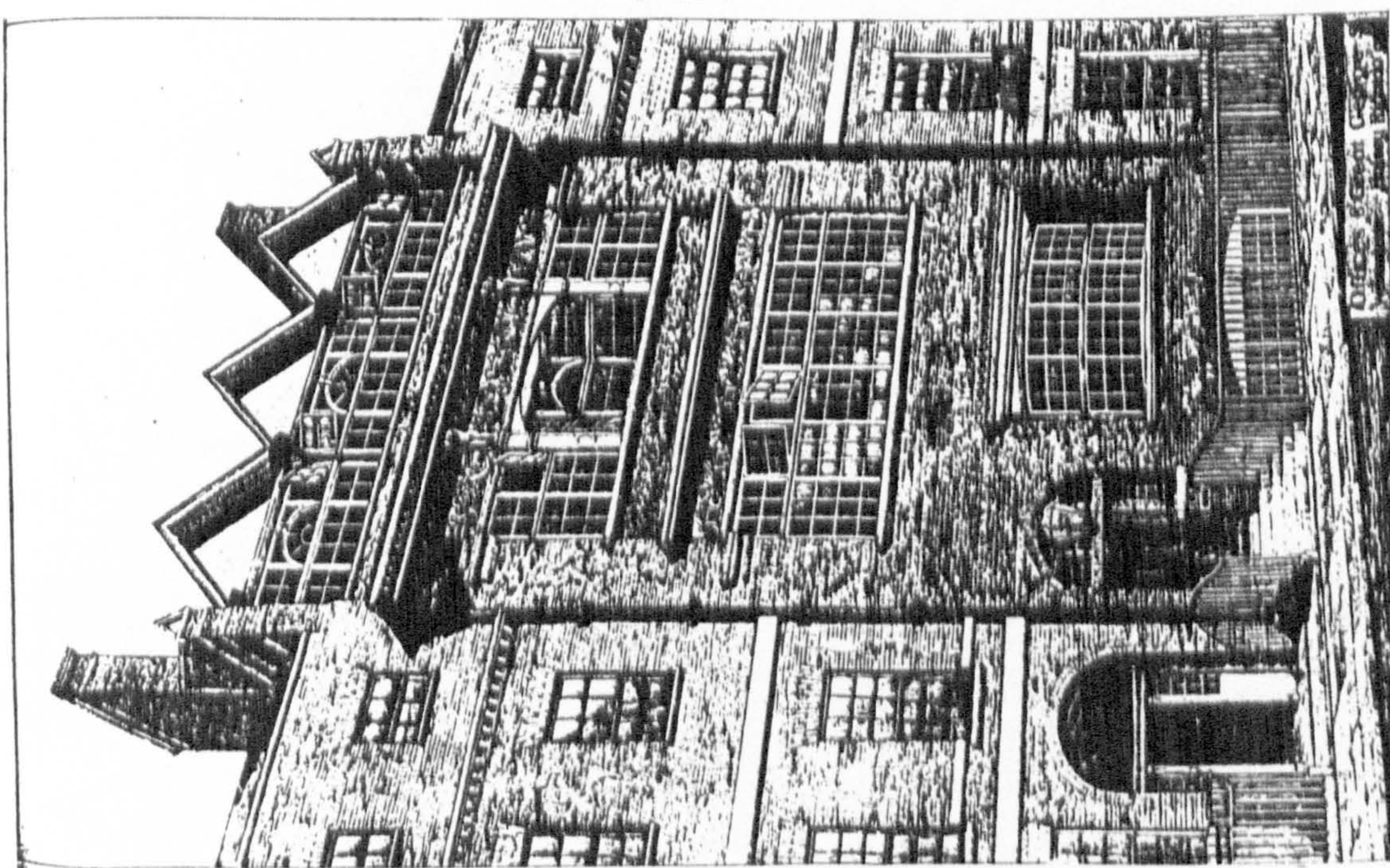


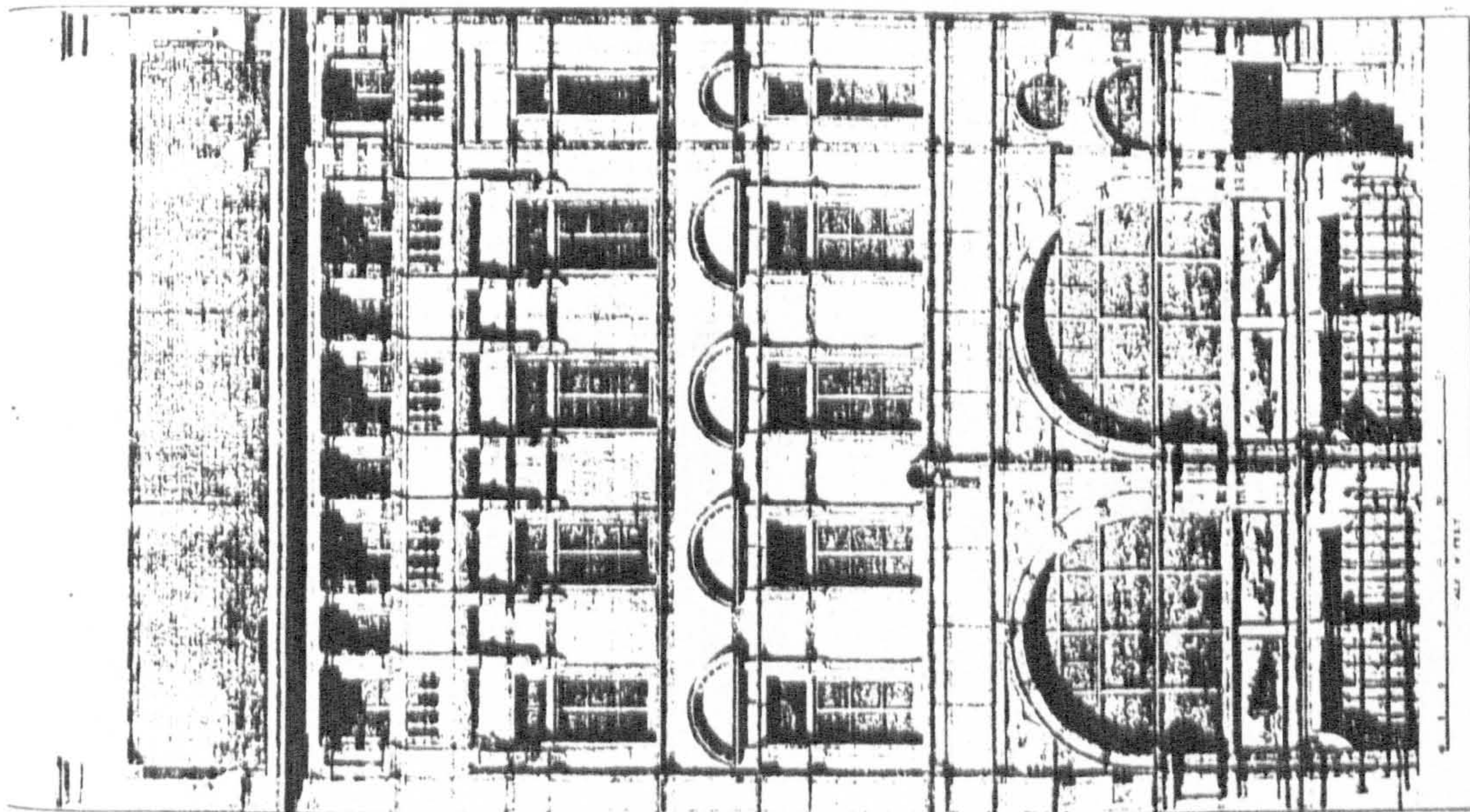


5-103

HUDDERSFIELD BANKING CO., Huddersfield, 1882
8 GREAT GEORGE STREET, Westminster, 1888

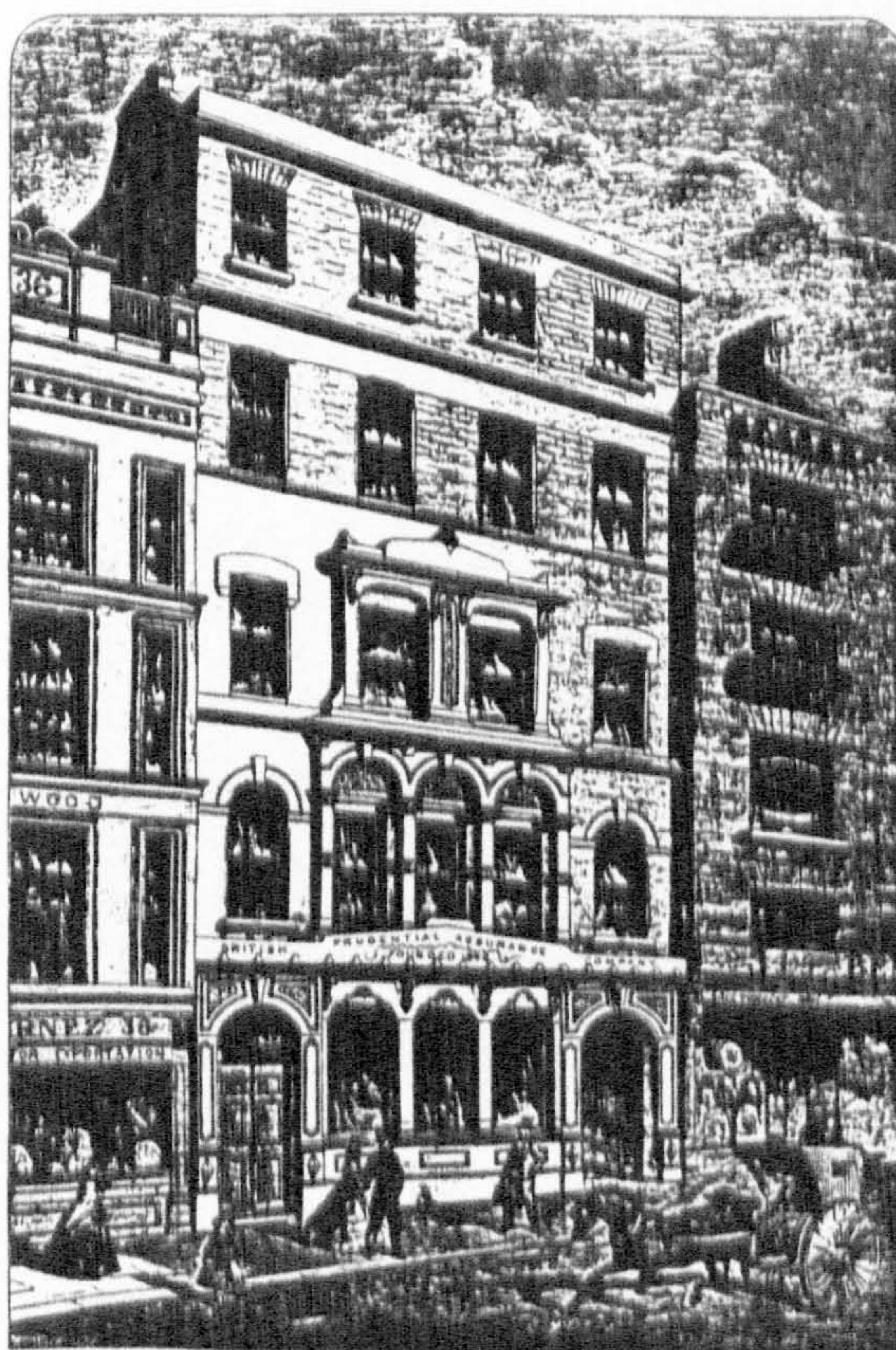
5-104



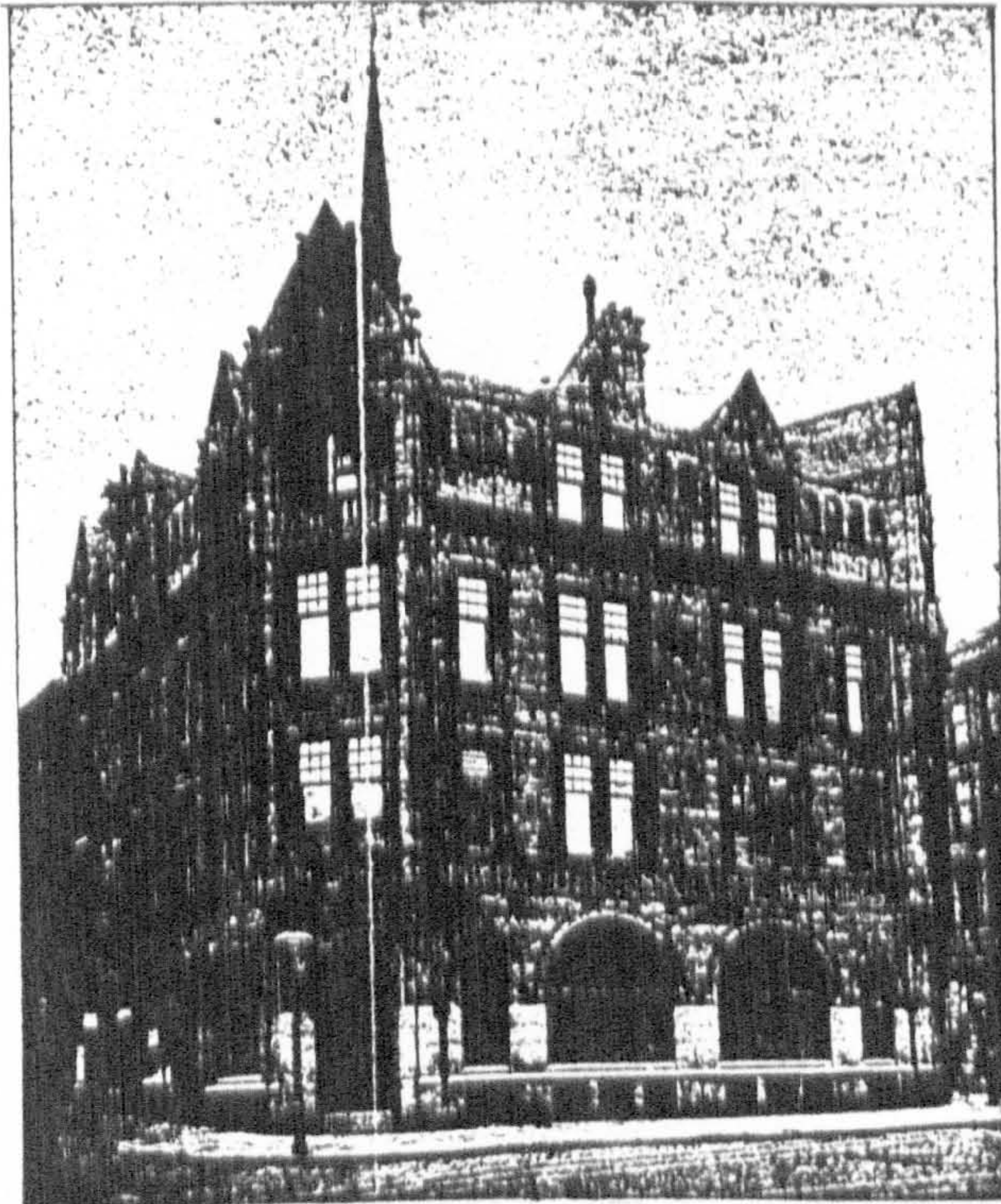


OFFICE FOR THE P & O STEAM NAVIGATION COMPANY, LTD., LEANESDALE STREET, E.C.
 No. 1 & 2, CORNER, F.B.I.A. (AMERICAN)

5-105
 P AND O OFFICES, City, 1893
 PRUDENTIAL ASSURANCE CO., City, 1863
 5-106



THE BUILDING PRUDENTIAL ASSURANCE COMPANY'S OFFICE, LONDON. No. 1 & 2, CORNER, F.B.I.A. (AMERICAN)

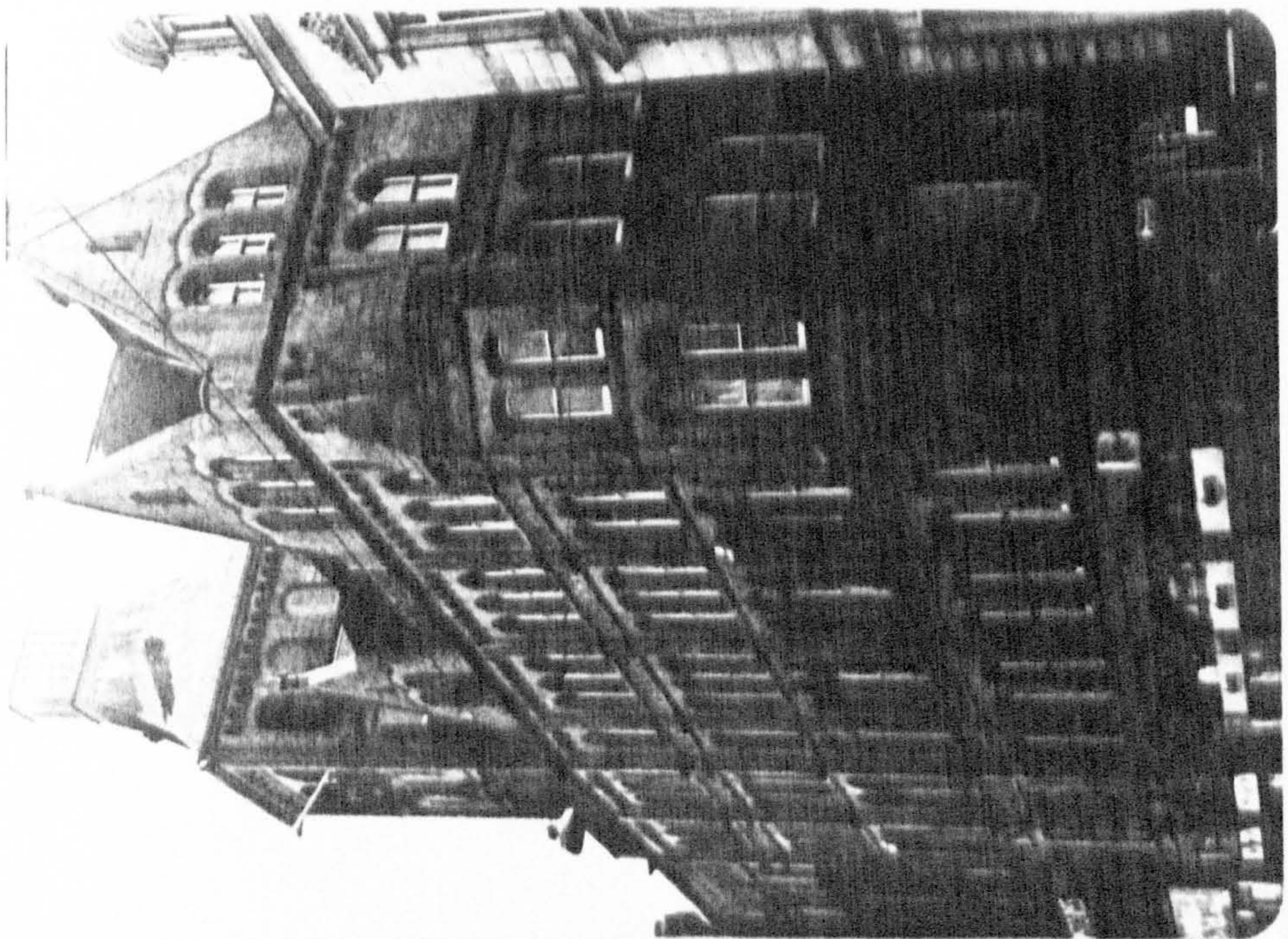


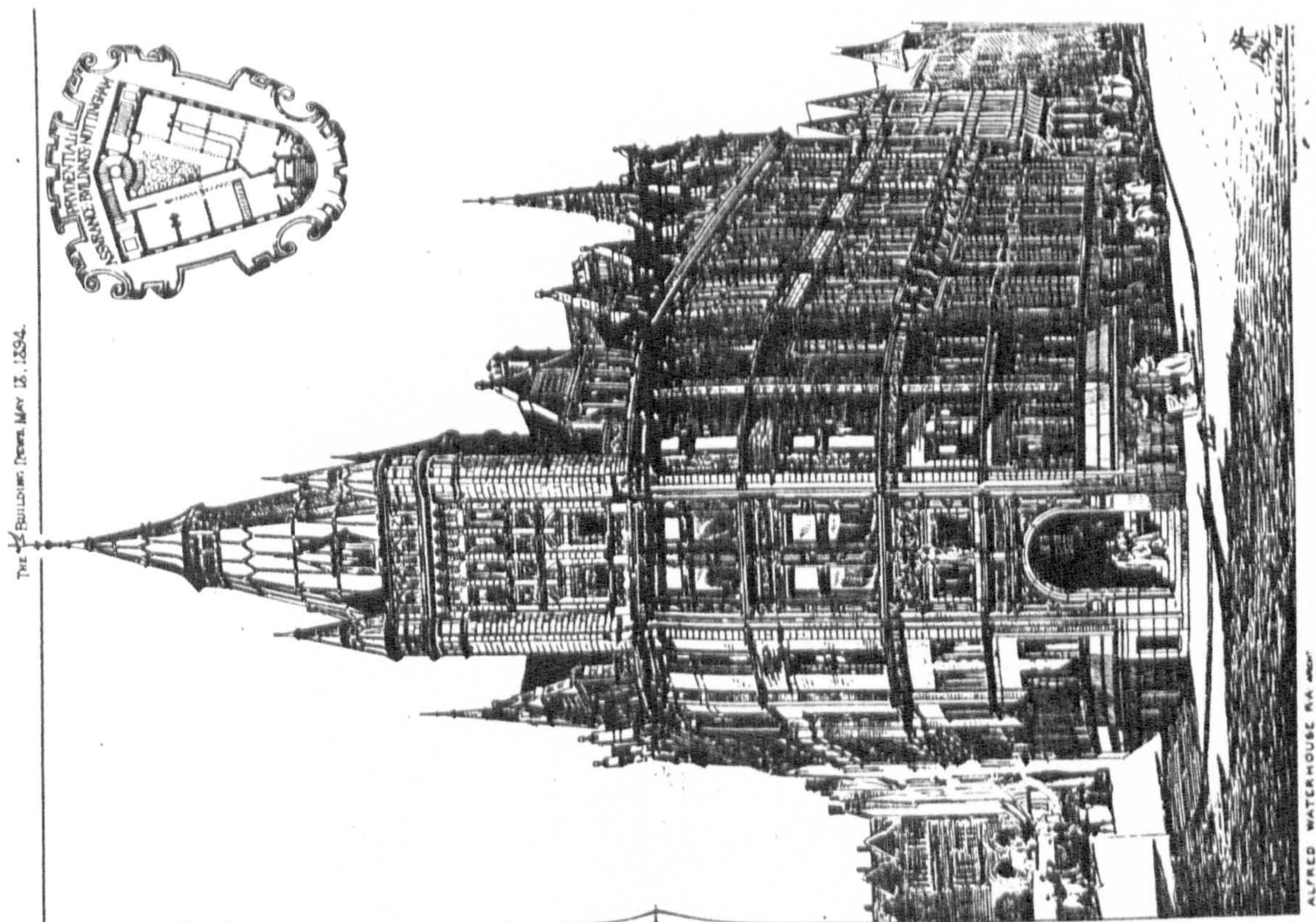
THE PRUDENTIAL ASSURANCE BUILDINGS.—(MESSRS. A. WATERHOUSE & SON.)

5-107

PRUDENTIAL ASSURANCE COMPANY, Bradford, 189-
PRUDENTIAL ASSURANCE COMPANY, Liverpool, 1885-1906

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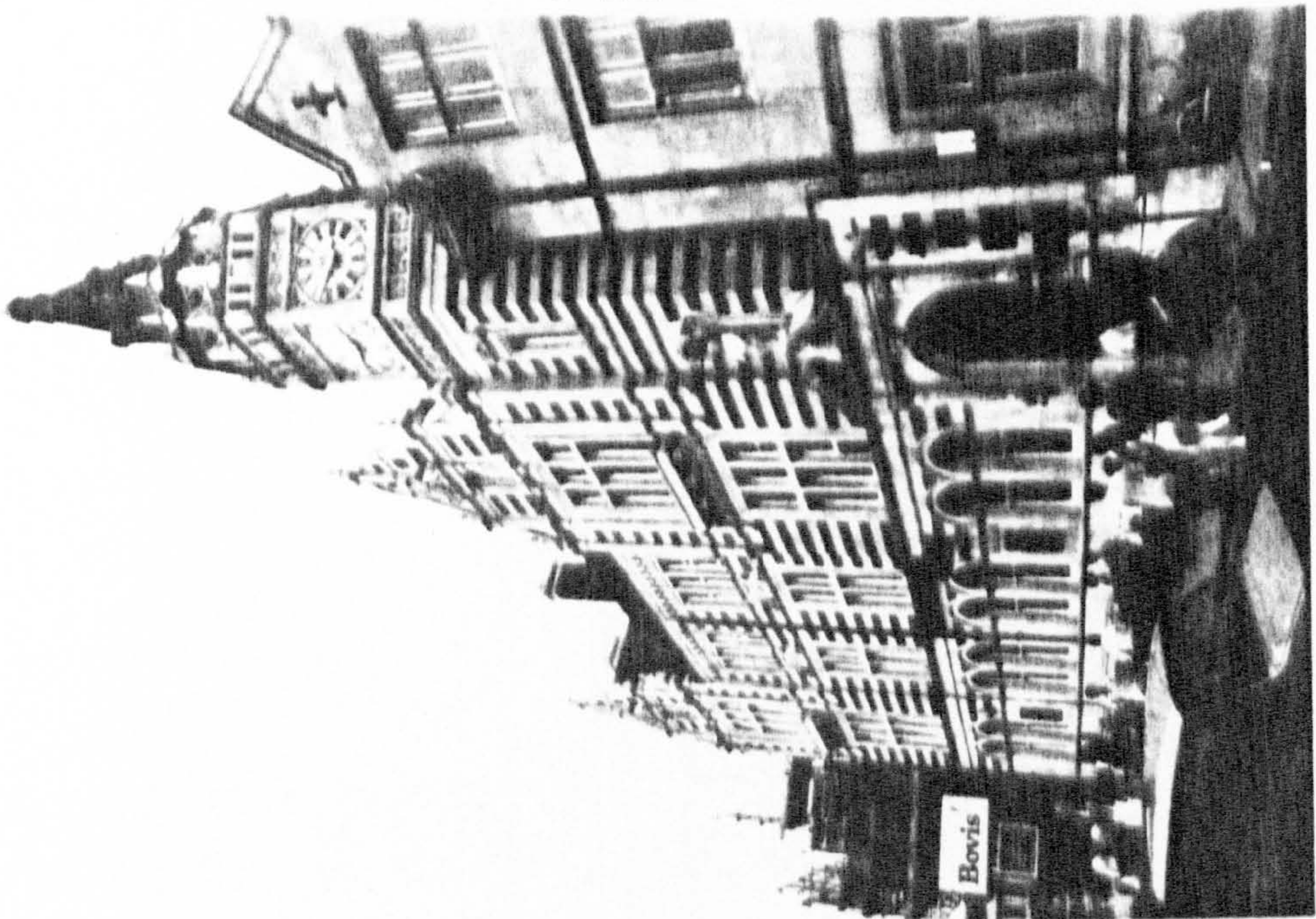


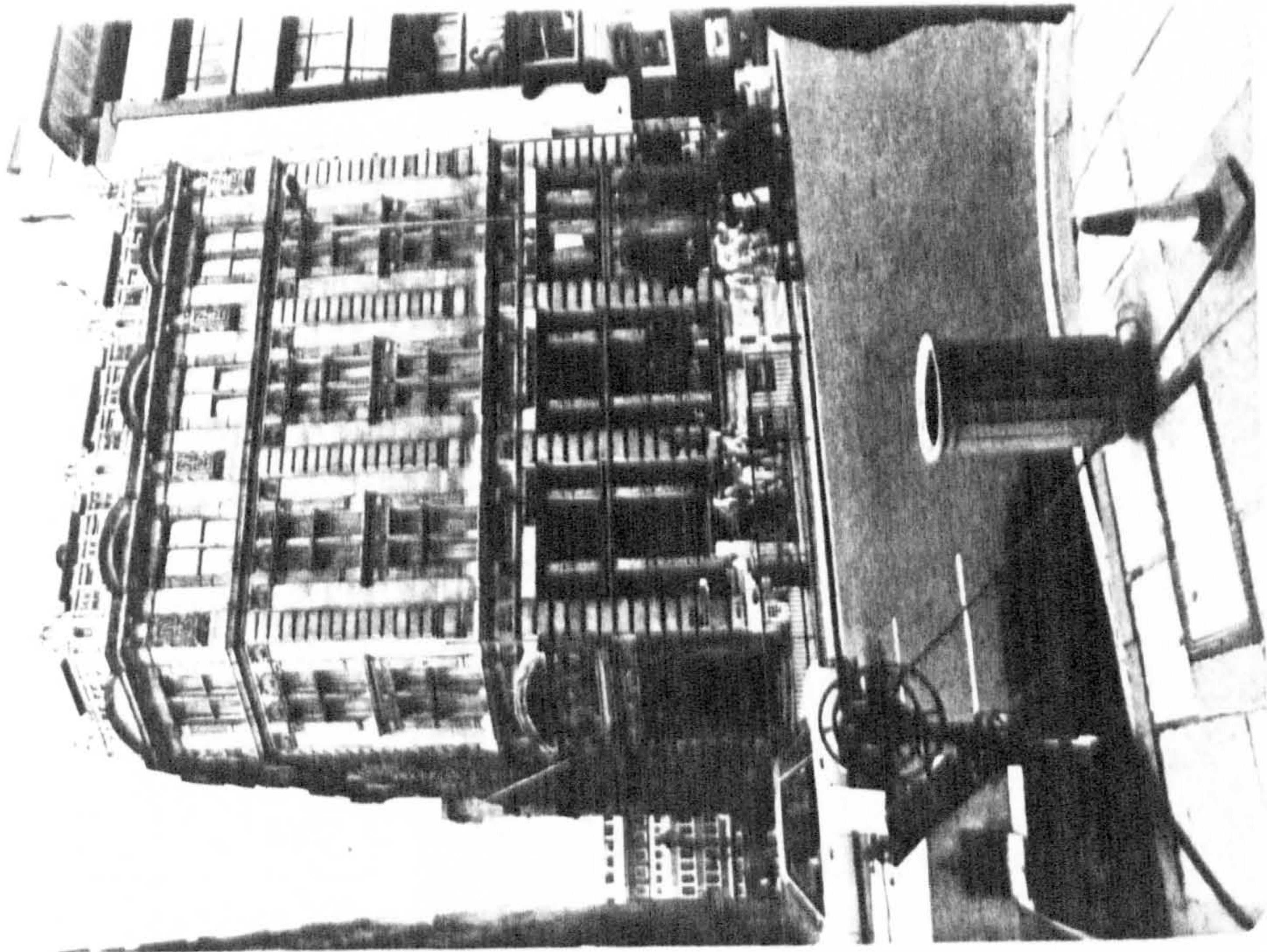
5-109
 PRUDENTIAL ASSURANCE COMPANY, Nottingham, 1894
 PRUDENTIAL ASSURANCE COMPANY, Glasgow, 1890
 5-110





5-111
 REFUGE ASSURANCE CO., Manchester, 188-
 FOSTERS BANK, Cambridge, 18--
 5-112

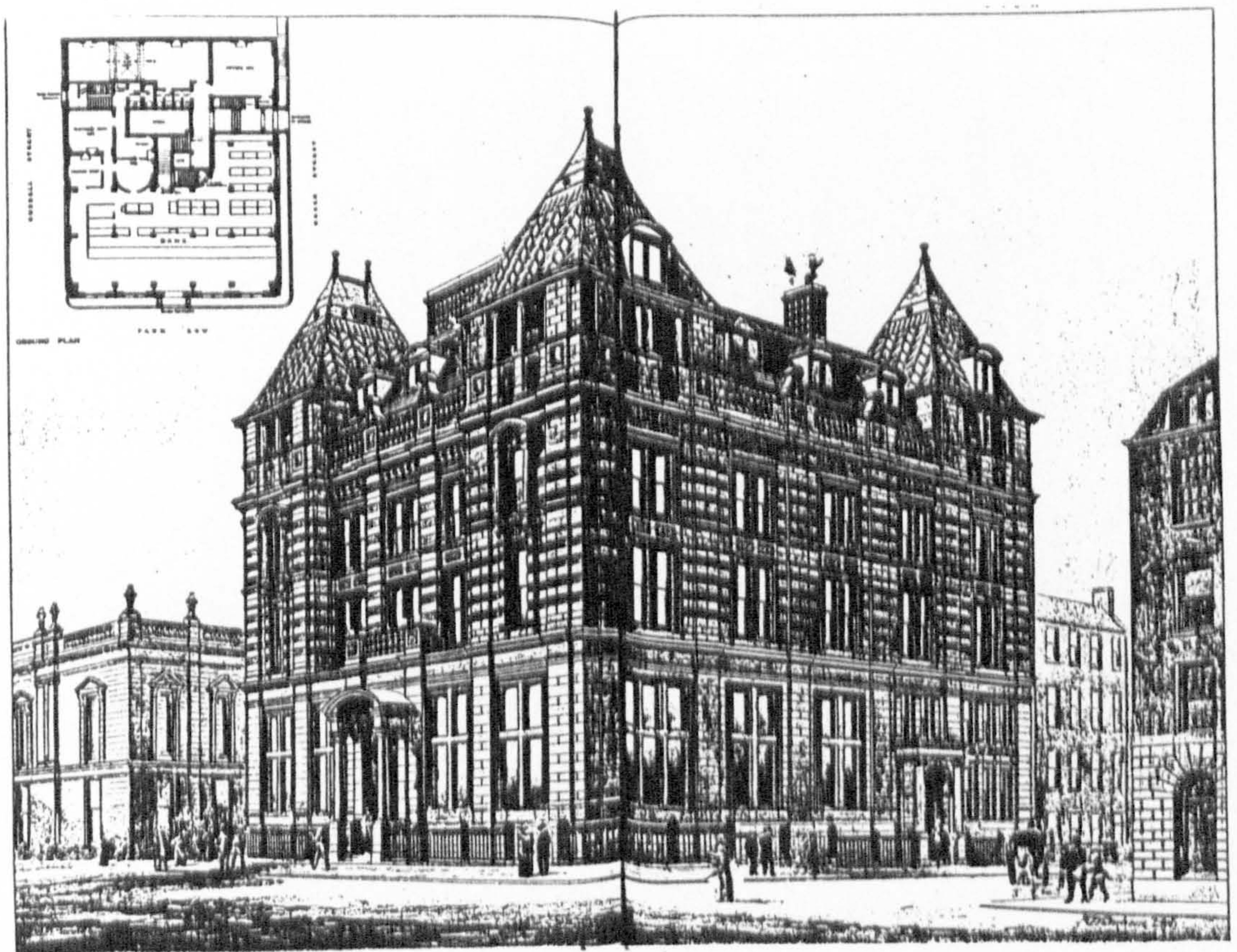


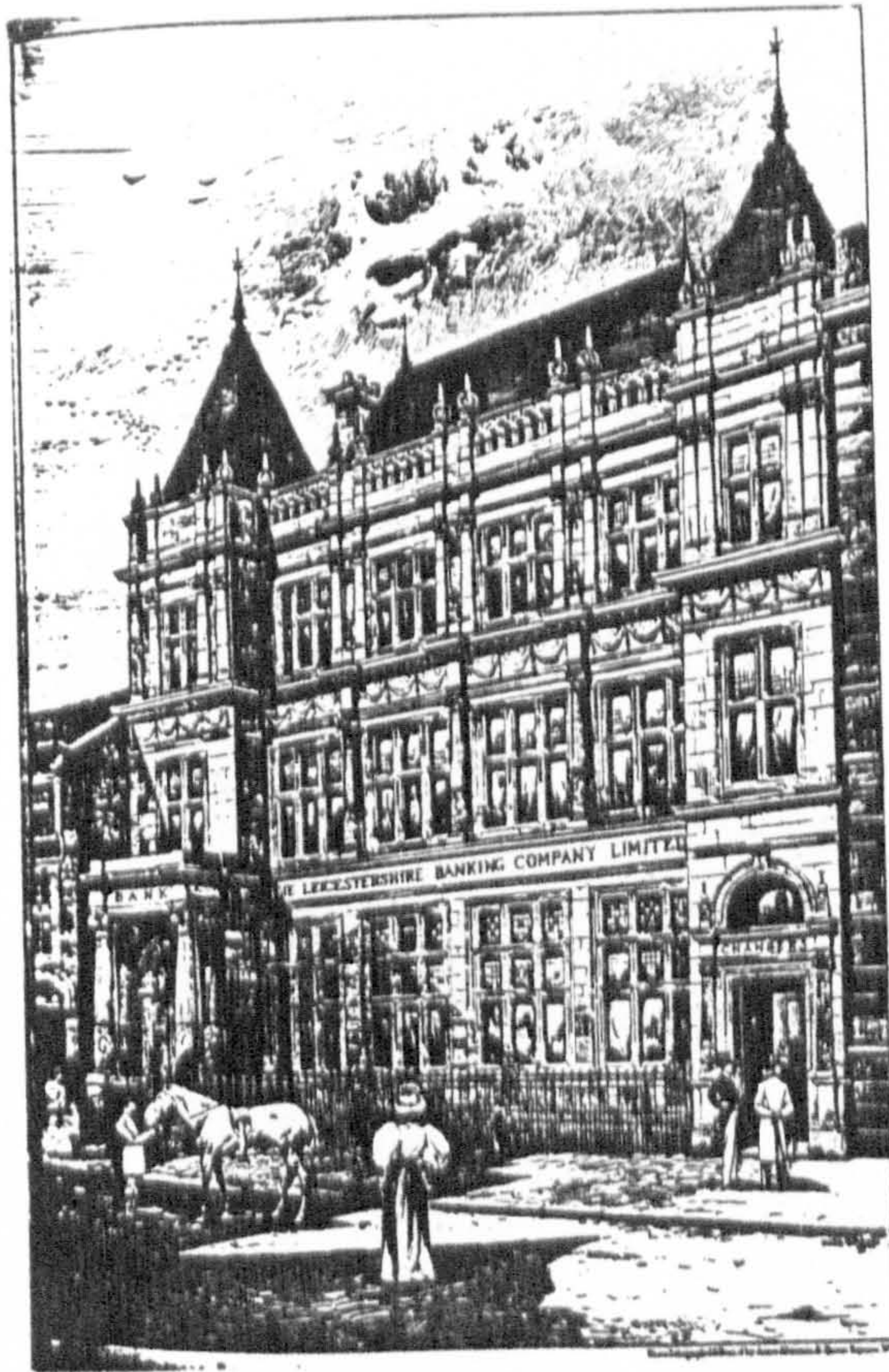


5-113

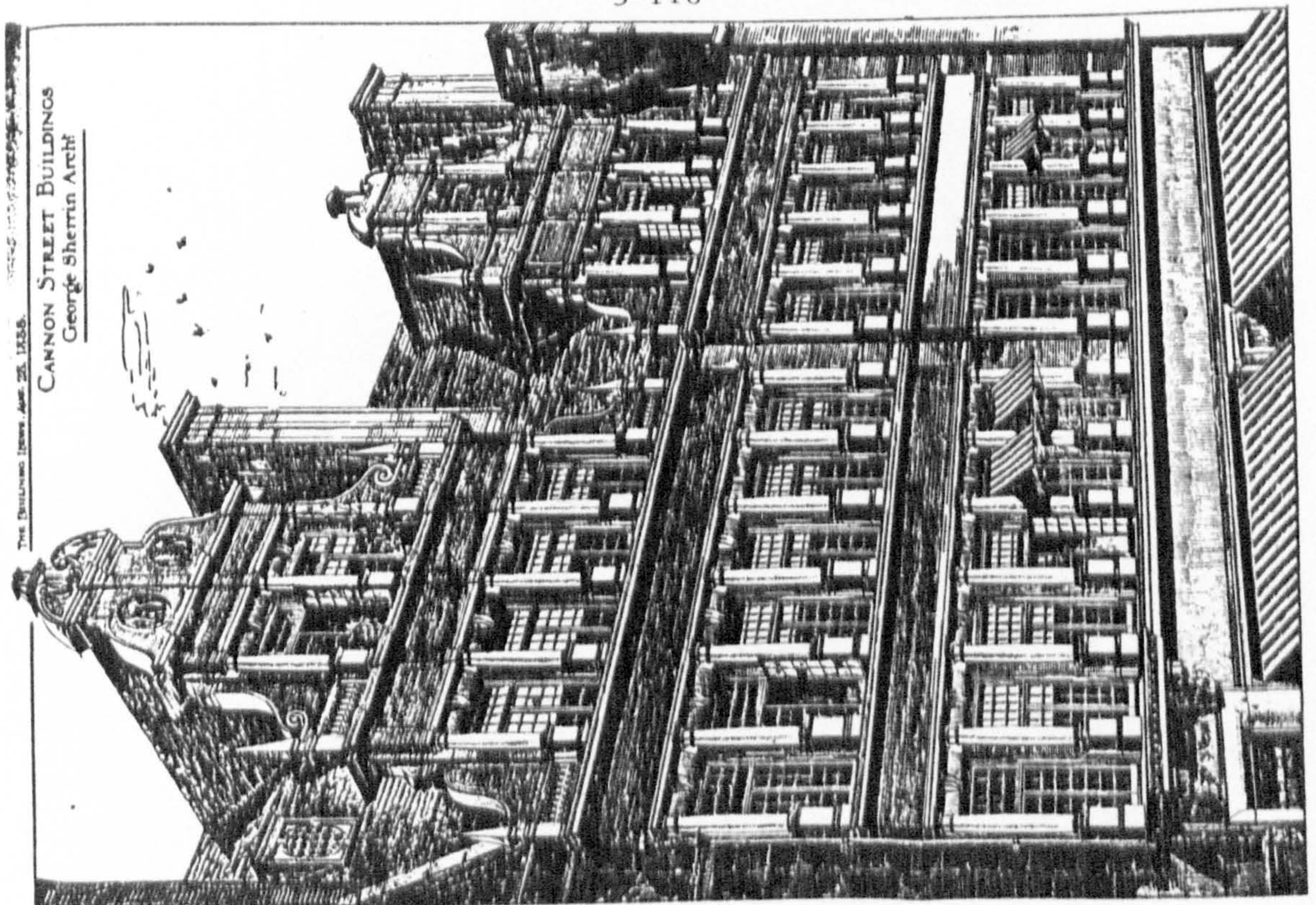
NATIONAL PROVINCIAL BANK, Westminster, 1893
WILLIAMS, WILLIAMS, BROWN AND CO., Leeds, 1896

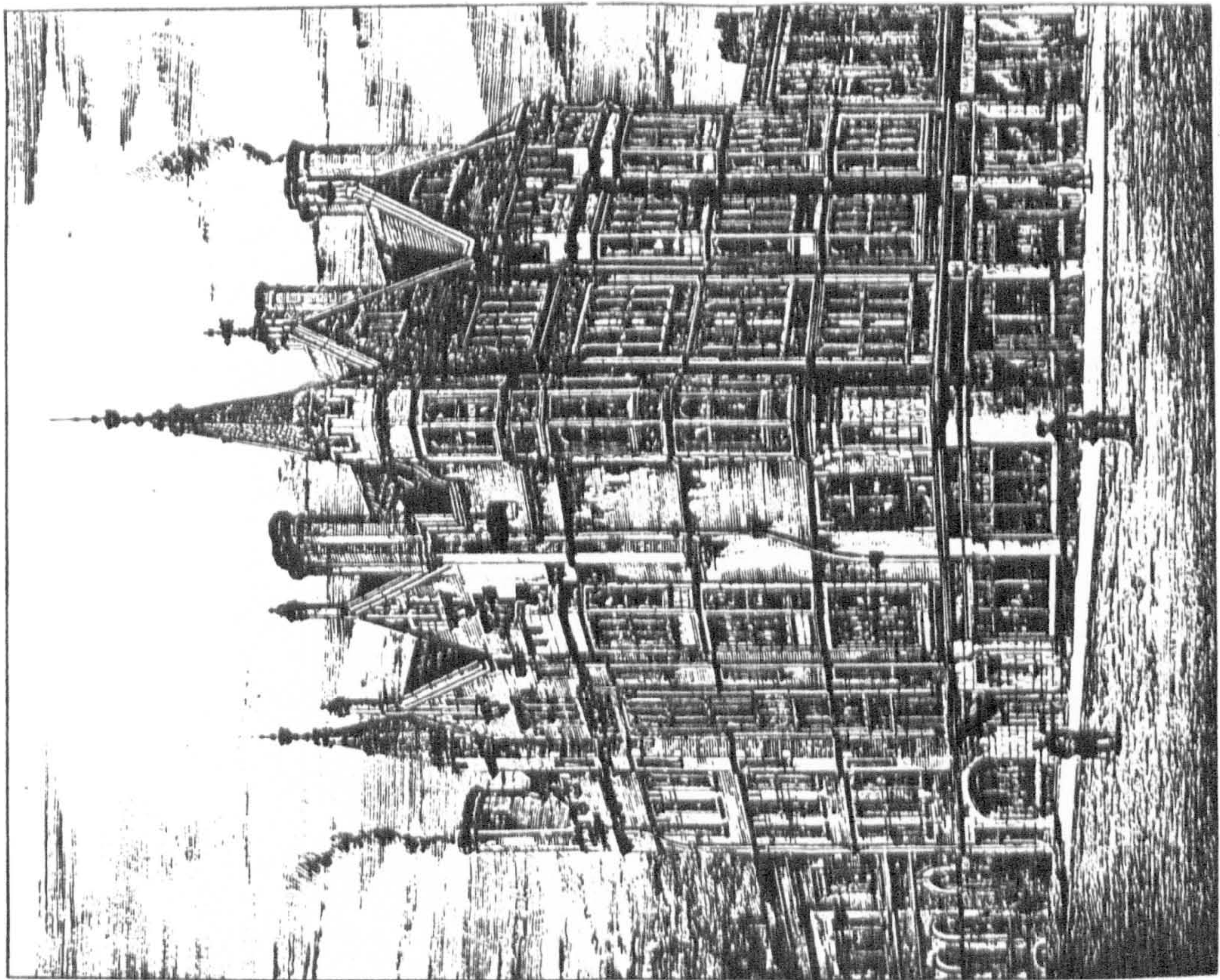
5-114





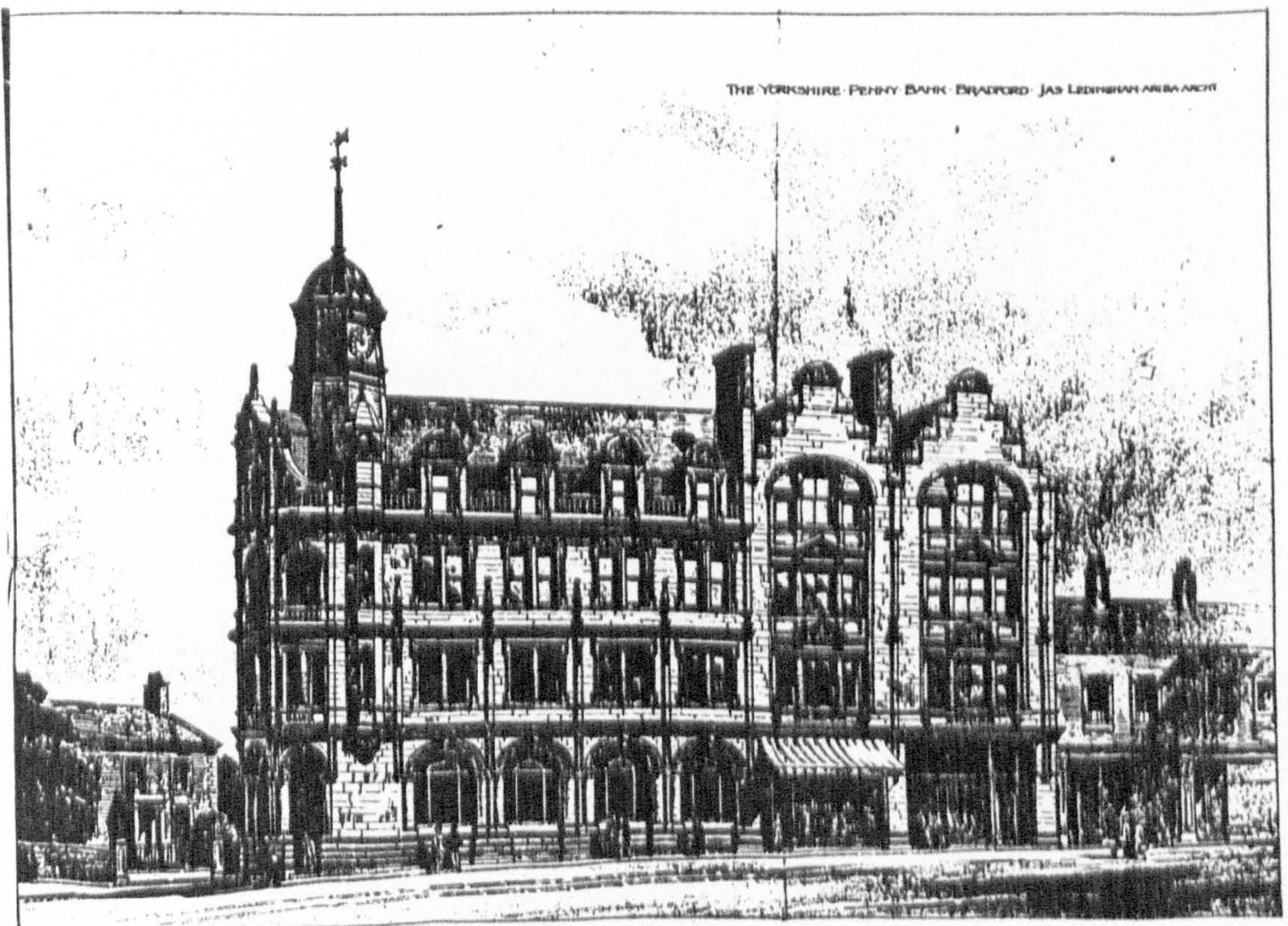
5-115
 LEICESTERSHIRE BANKING CO., Loughborough, 1898
 CANNON STREET BUILDINGS, City, 1885
 5-116

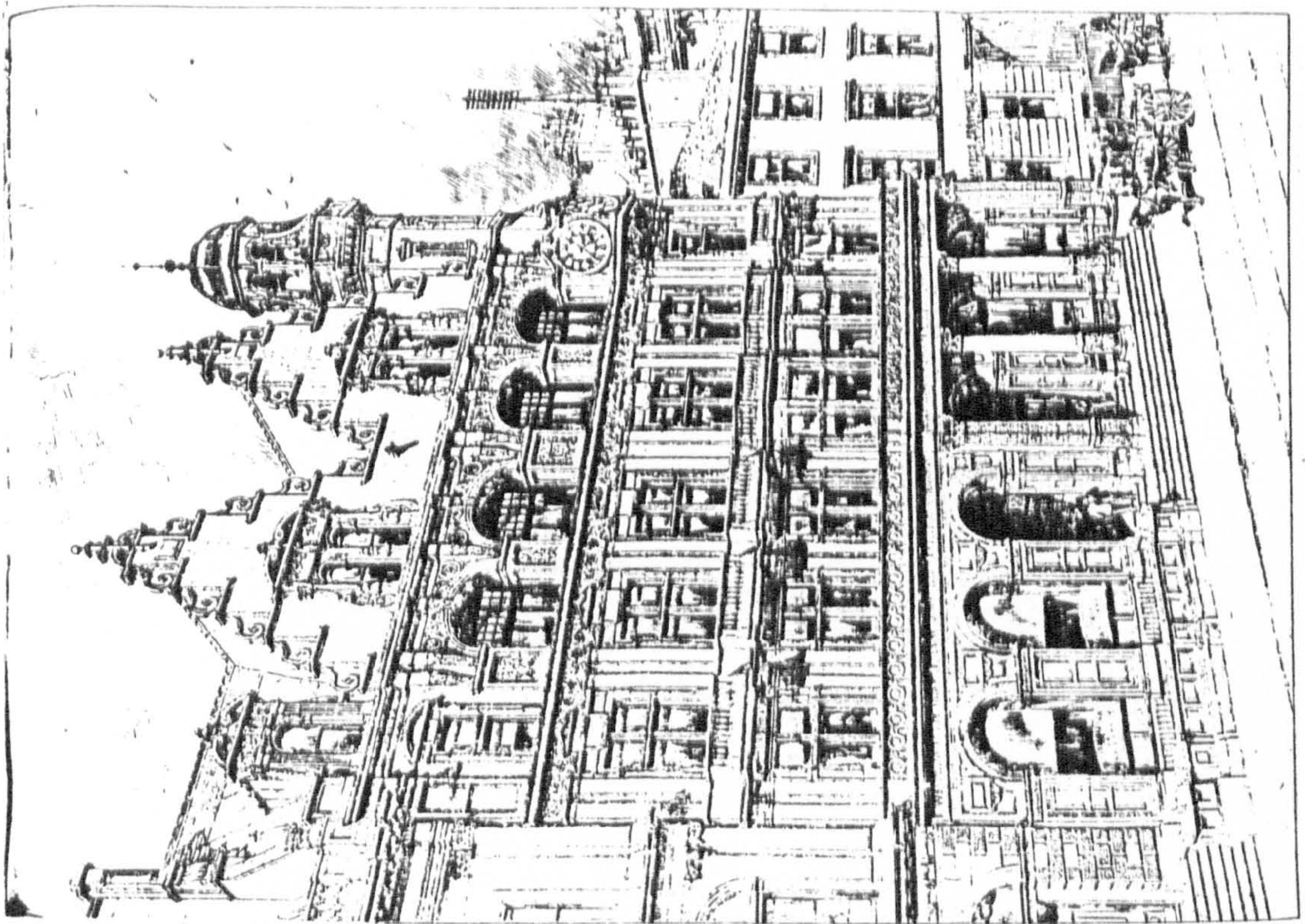




OFFICES AT SHEFFIELD FOR MENING PATRONS & BALLIFORD.

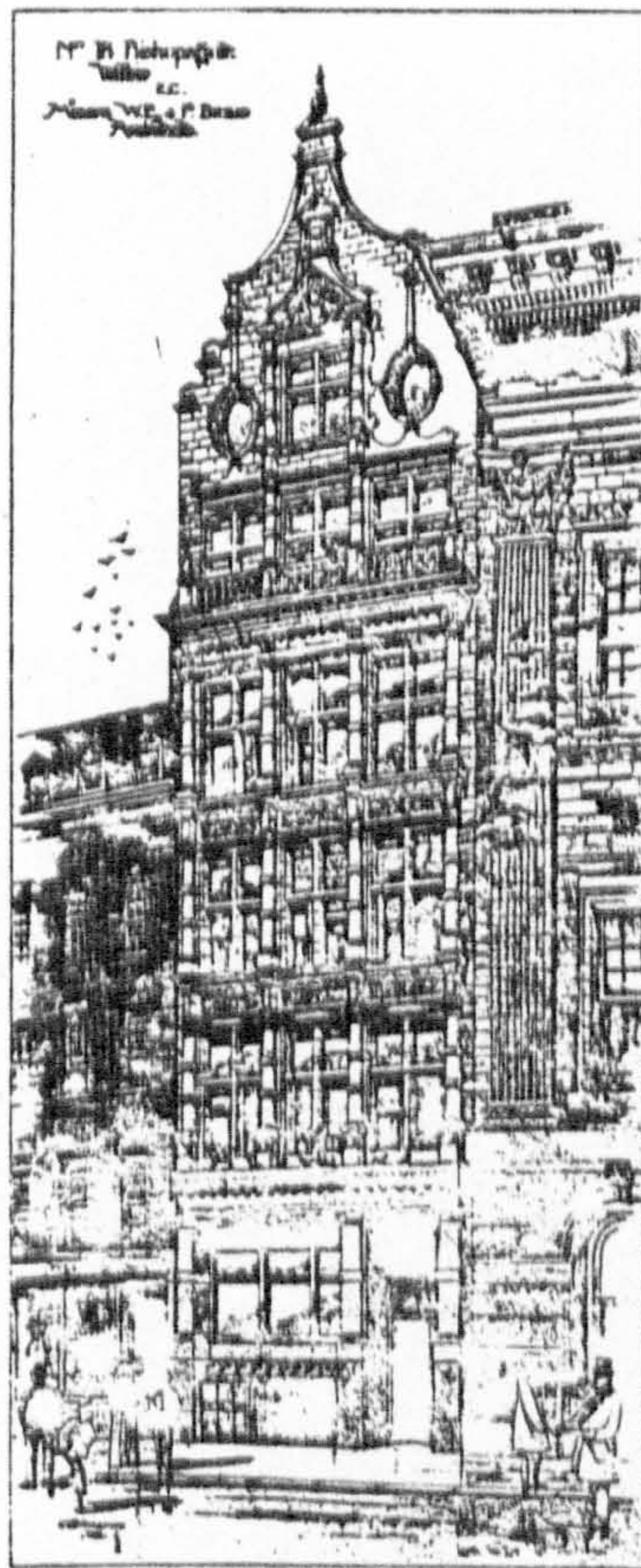
5-117
OFFICES, Sheffield, 1884
YORKSHIRE PENNY BANK, Bradford, 1892
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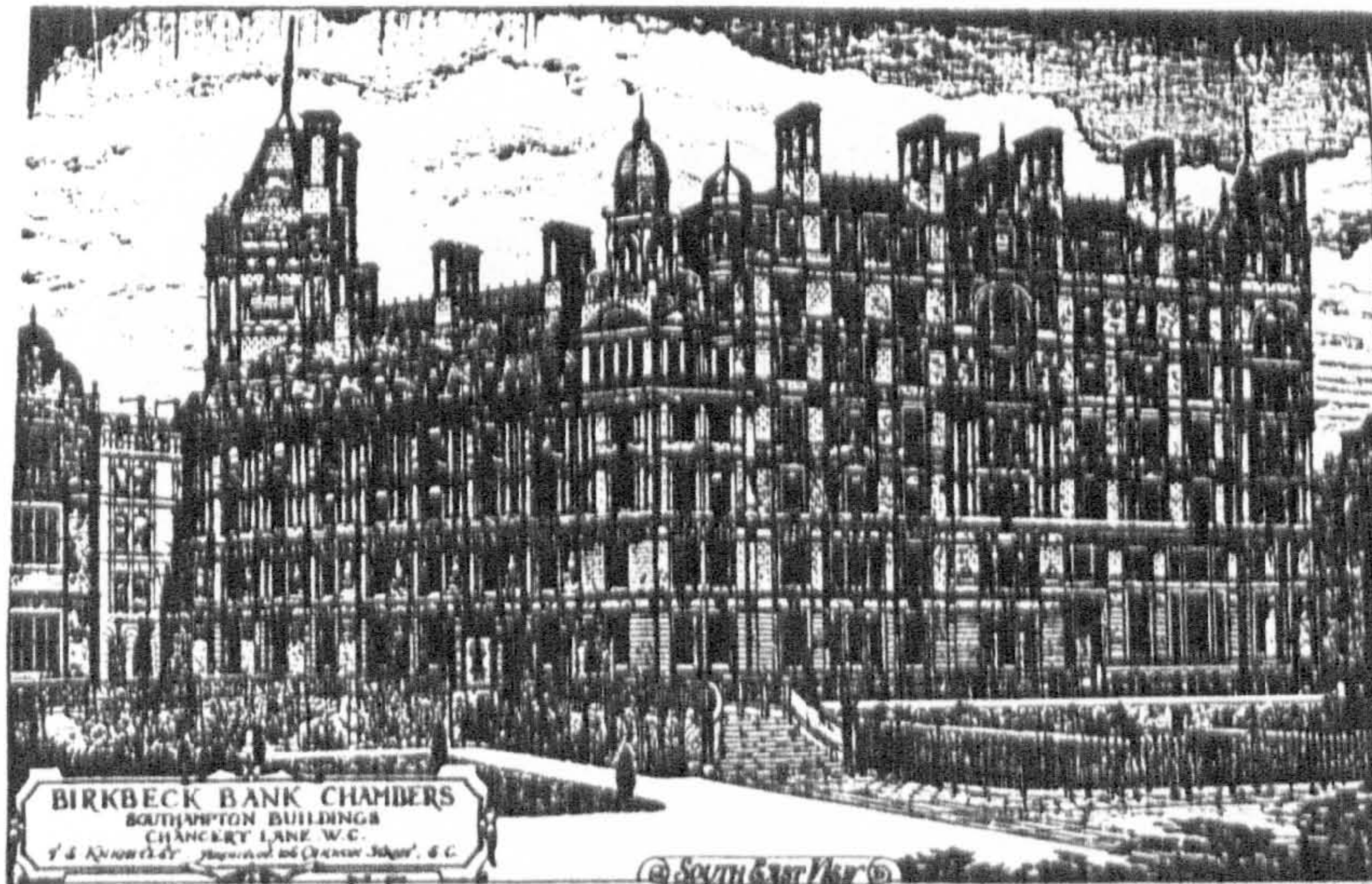




OFFICES OF THE "GLASGOW EVENING CITIZEN" T. L. WATSON PRINTER ANDY

5-119
GLASGOW EVENING CITIZEN, Glasgow, 1891
NO. 18 BISHOPSGATE, City, 1893
5-120





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BIRKBECK BANK CHAMBERS, Westminster, 1902
74 CORNHILL, City, 1874

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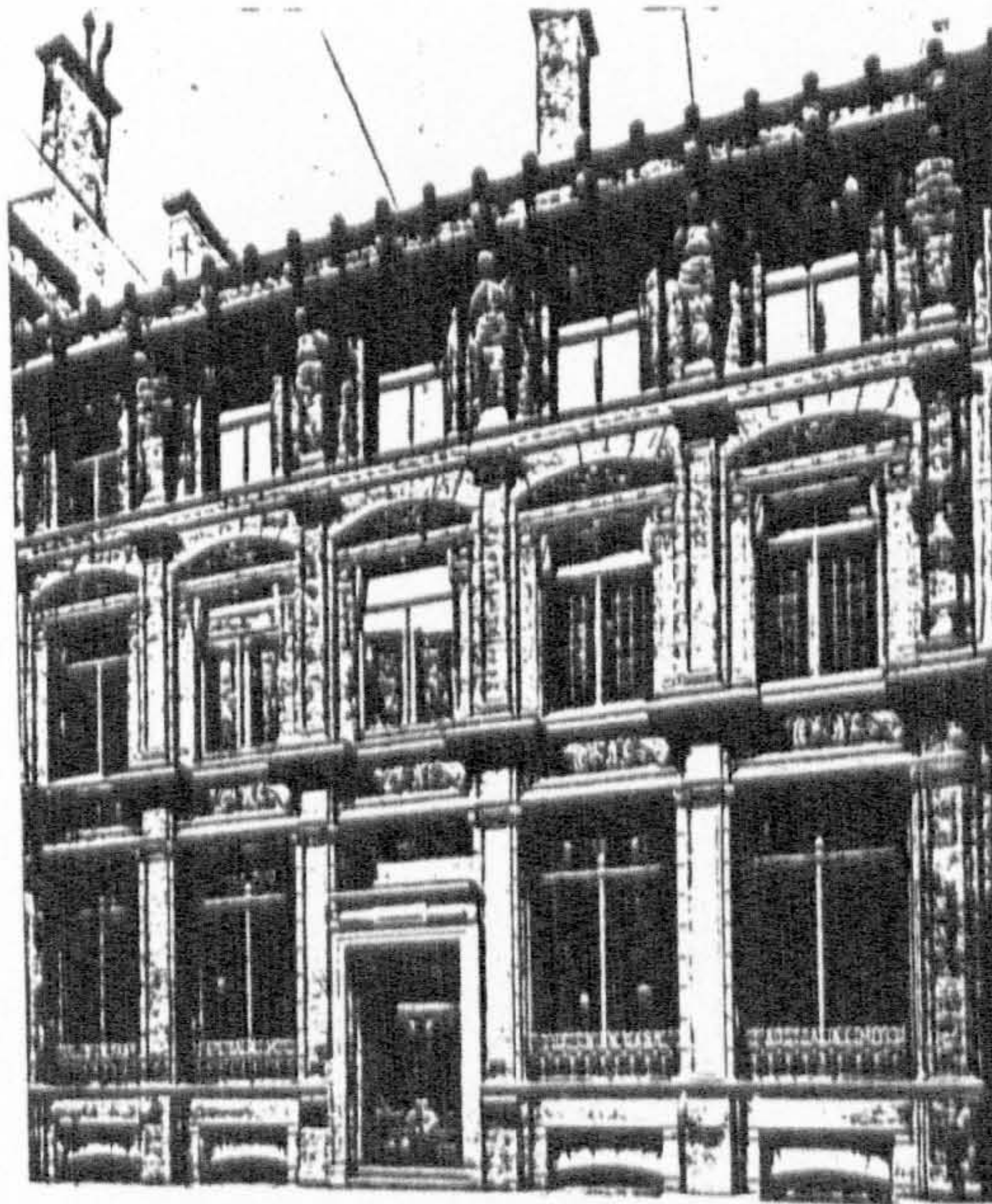
Opp. Buildings, Nos. 46, 47, & 48, Lombard Street, City, 1866

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46, 47, & 48 LOMBARD STREET, City, 1866

UNION BANK OF AUSTRALIA, City, 188-

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THE UNION BANK OF AUSTRALIA, NOS. 71-75, CORNHILL, S.E.

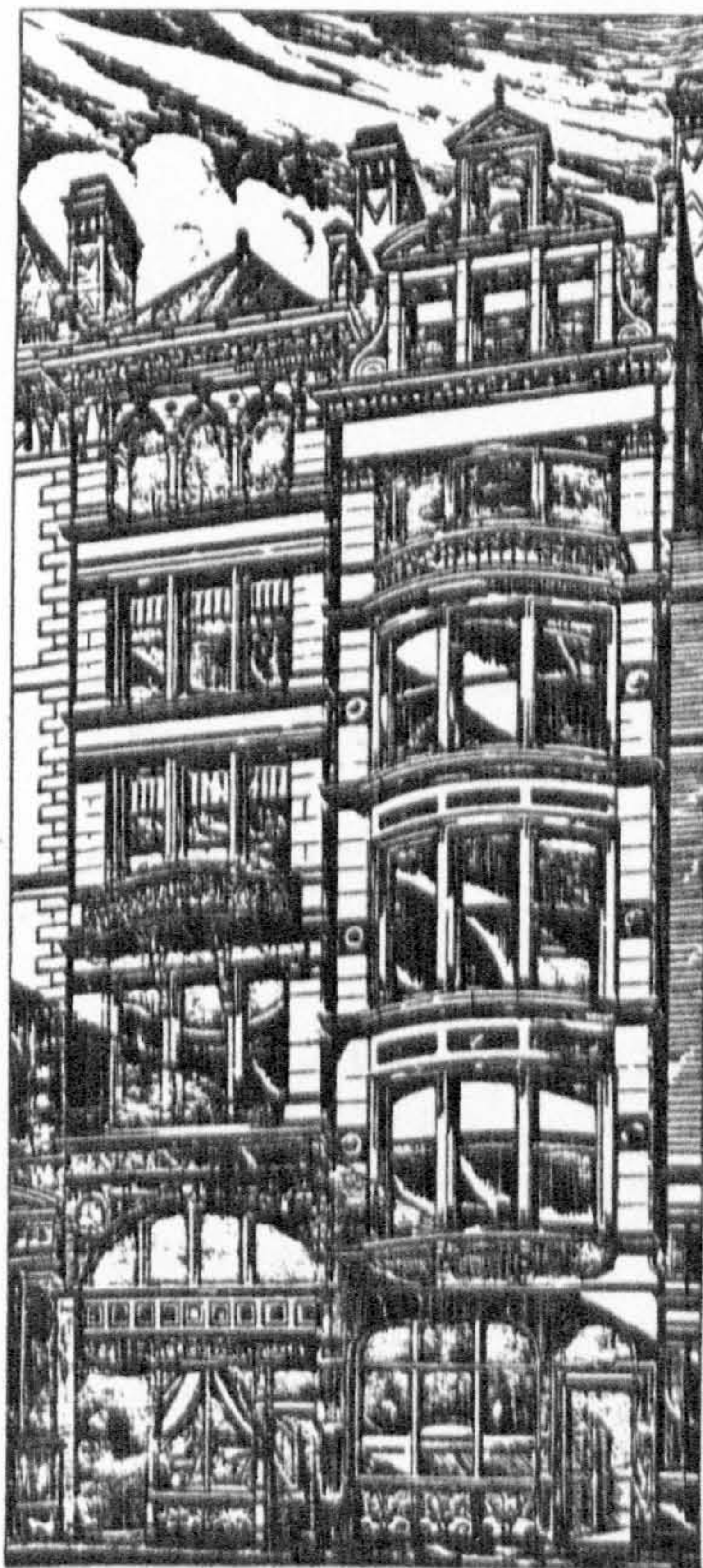


Offices, King William-Street, E.C.
W. A. Boulton, Architect.

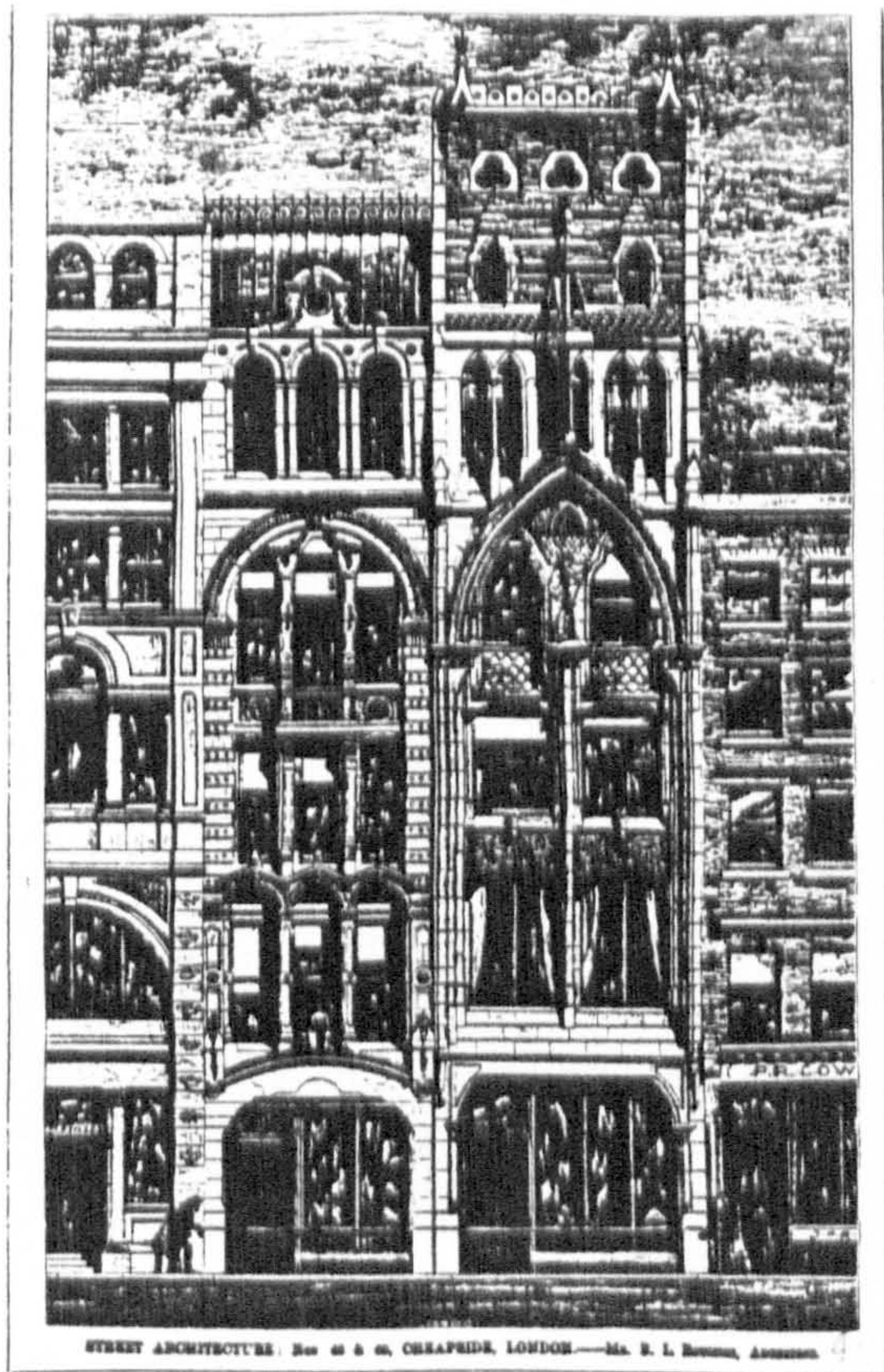
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STANDARD LIFE ASSURANCE SOCIETY, City, 188-
31 & 32 CORNHILL, City, 1888

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OFFICES, 31 & 32, CORNHILL.—Messrs. Brown F. Adams & Son, Architects.

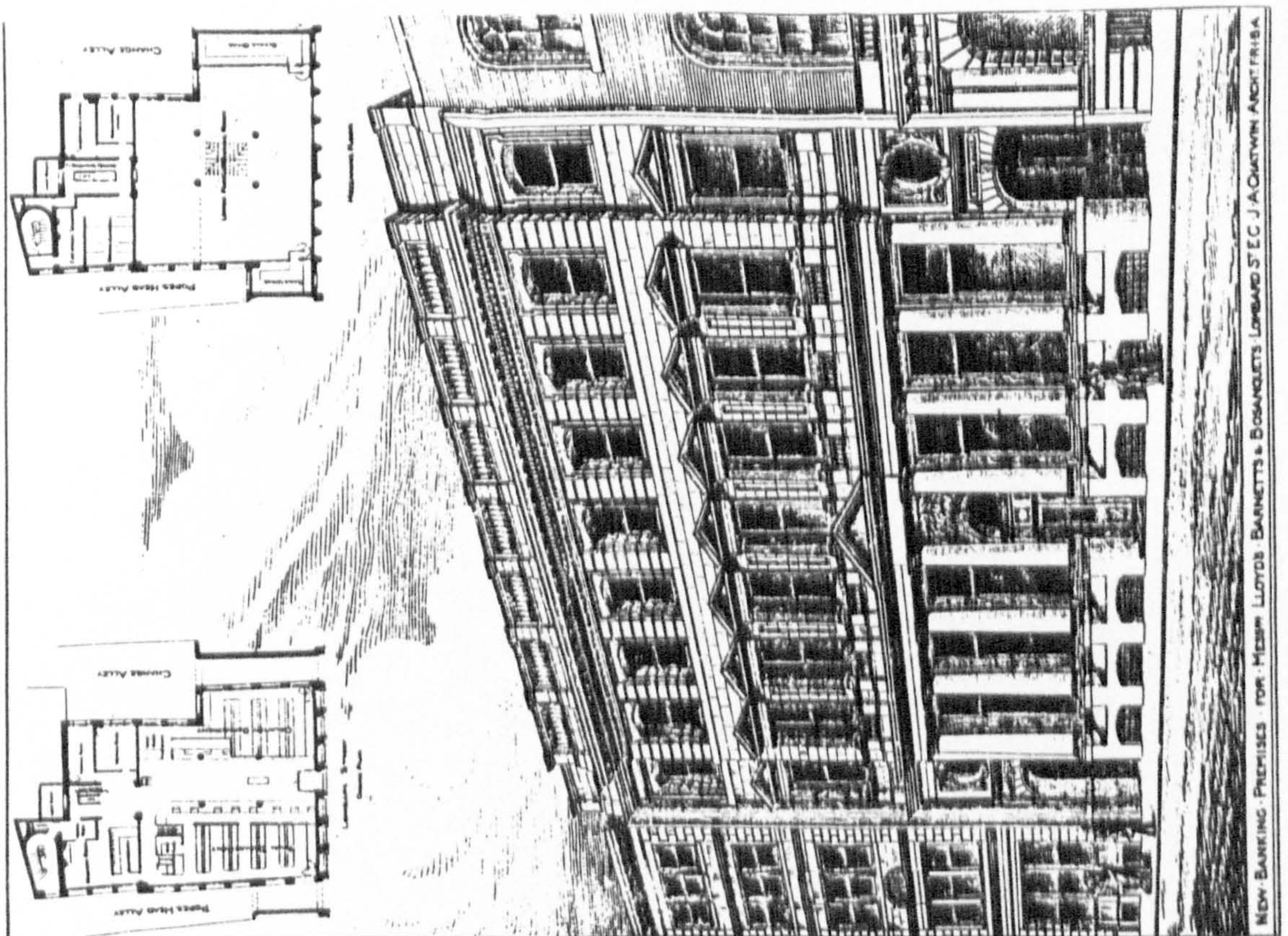


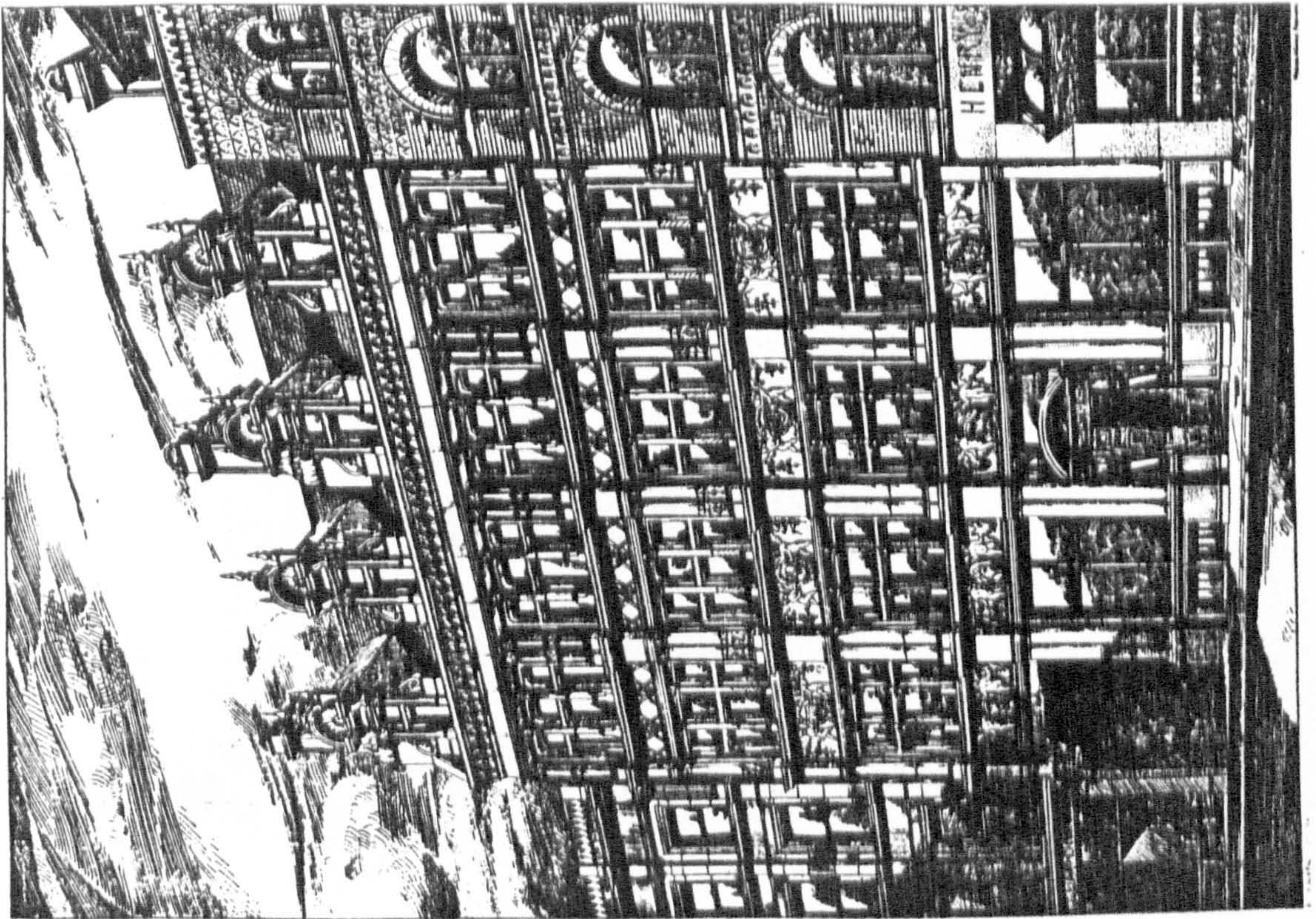
5-127

48 & 49 CHEAPSIDE, City, 1874

LLOYDS, BARNETTS AND BOSANQUETS BANK, City, 1887

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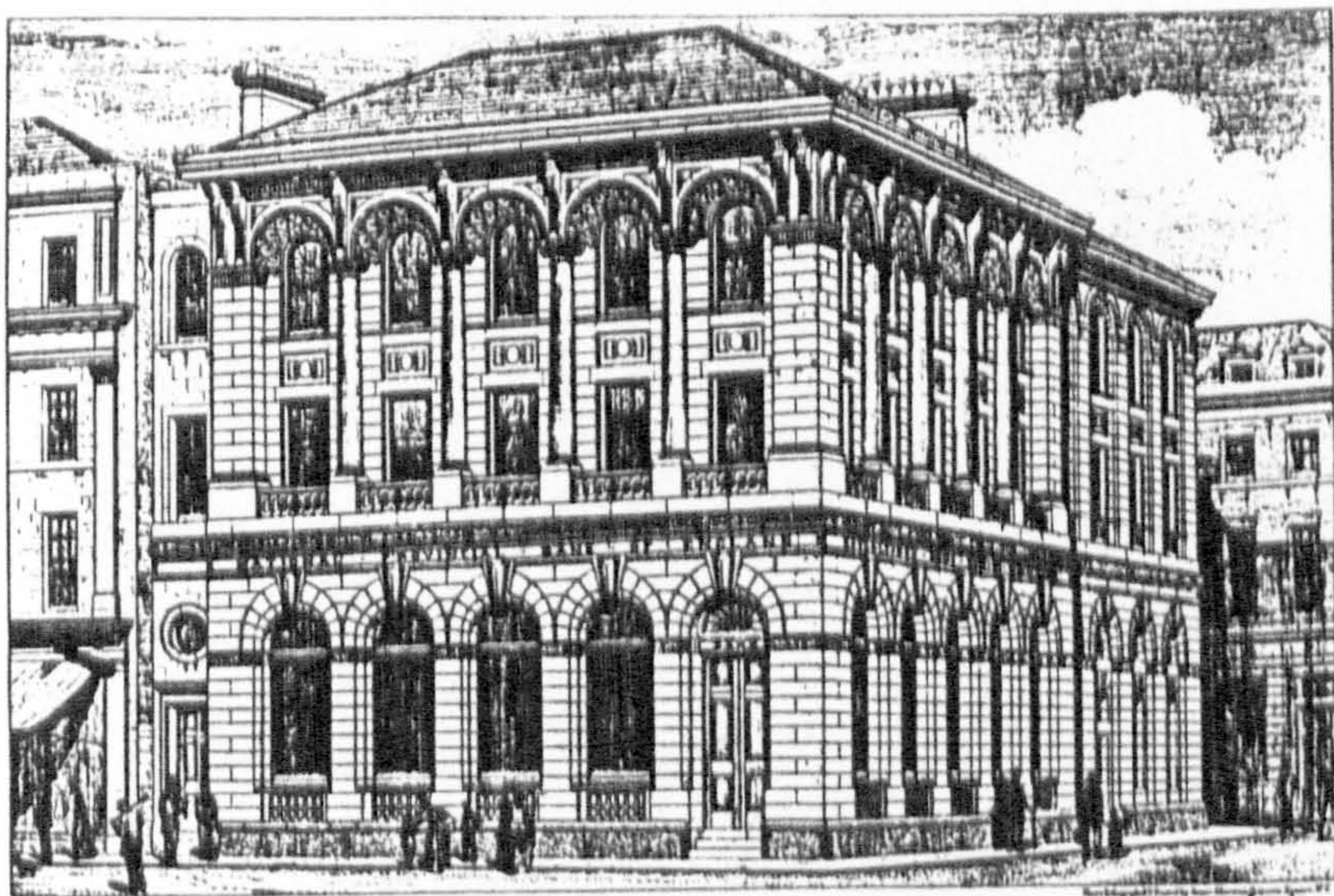




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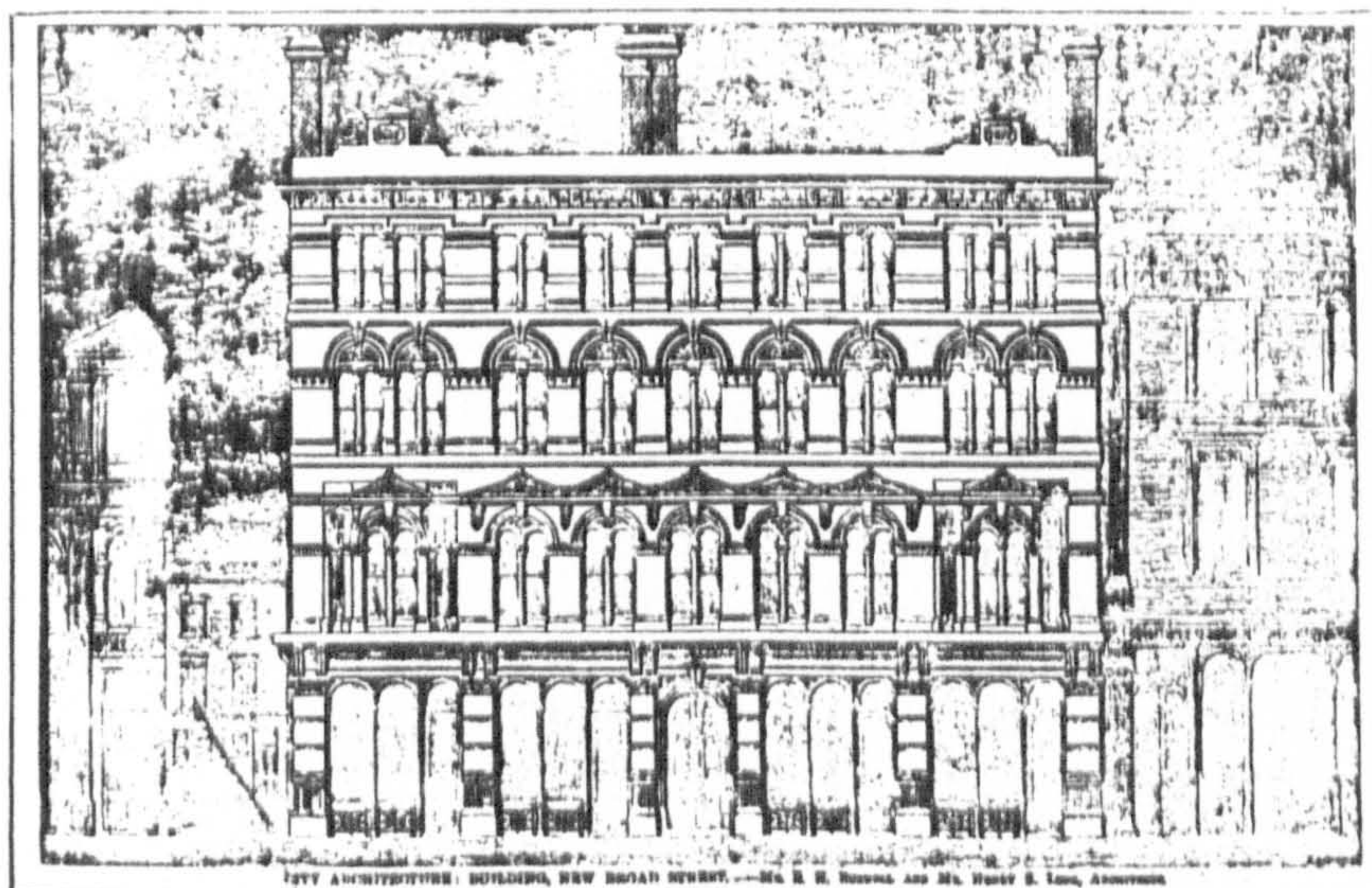
LONDON AND LANCASHIRE LIFE, City, 1881
NATIONAL PROVINCIAL BANK, Sunderland, 1879

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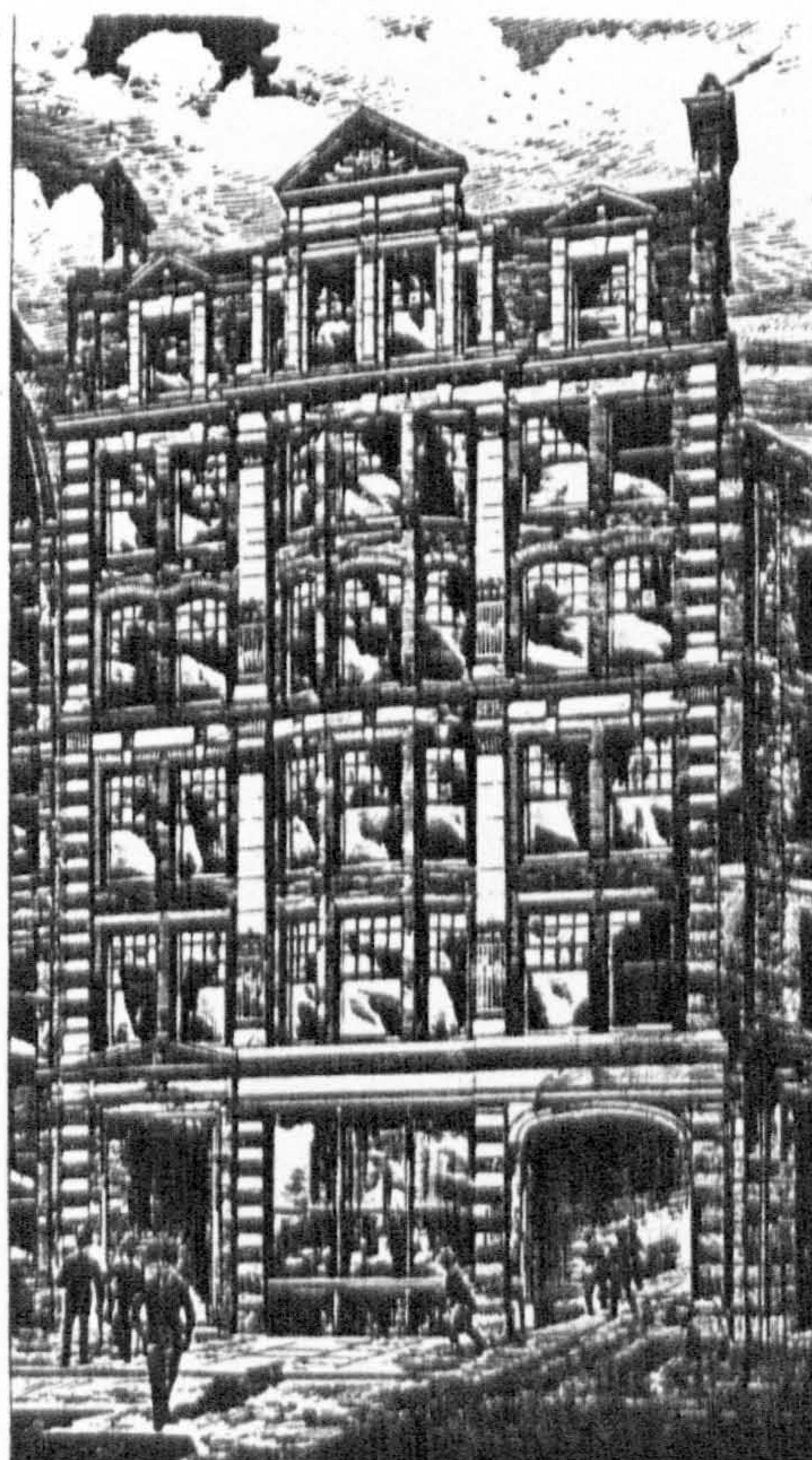


NEW BRANCH PROVIDED FOR THE NATIONAL PROVINCIAL BANK OF ENGLAND, SUNDERLAND. JOHN GOSBORNE ARCHT. 1879.

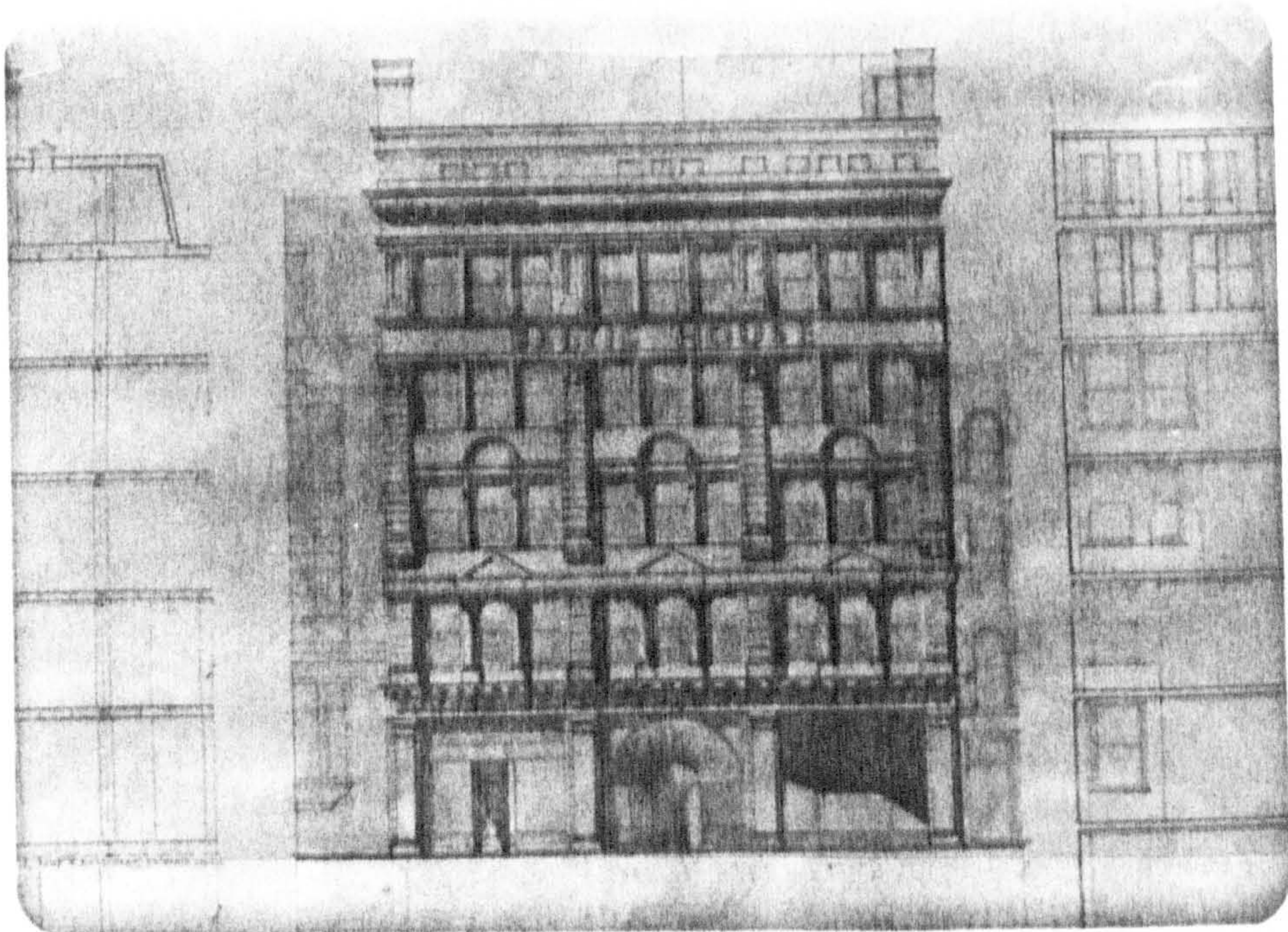
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 NEW BROAD STREET OFFICE, City, 1879
 BUCKLESBURY OFFICES, City, 1880
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LONDON STREET ARCHITECTURE: HOUSE IN BUCKLESBURY.—MR. WOODS, F.R.A., ARCHT.

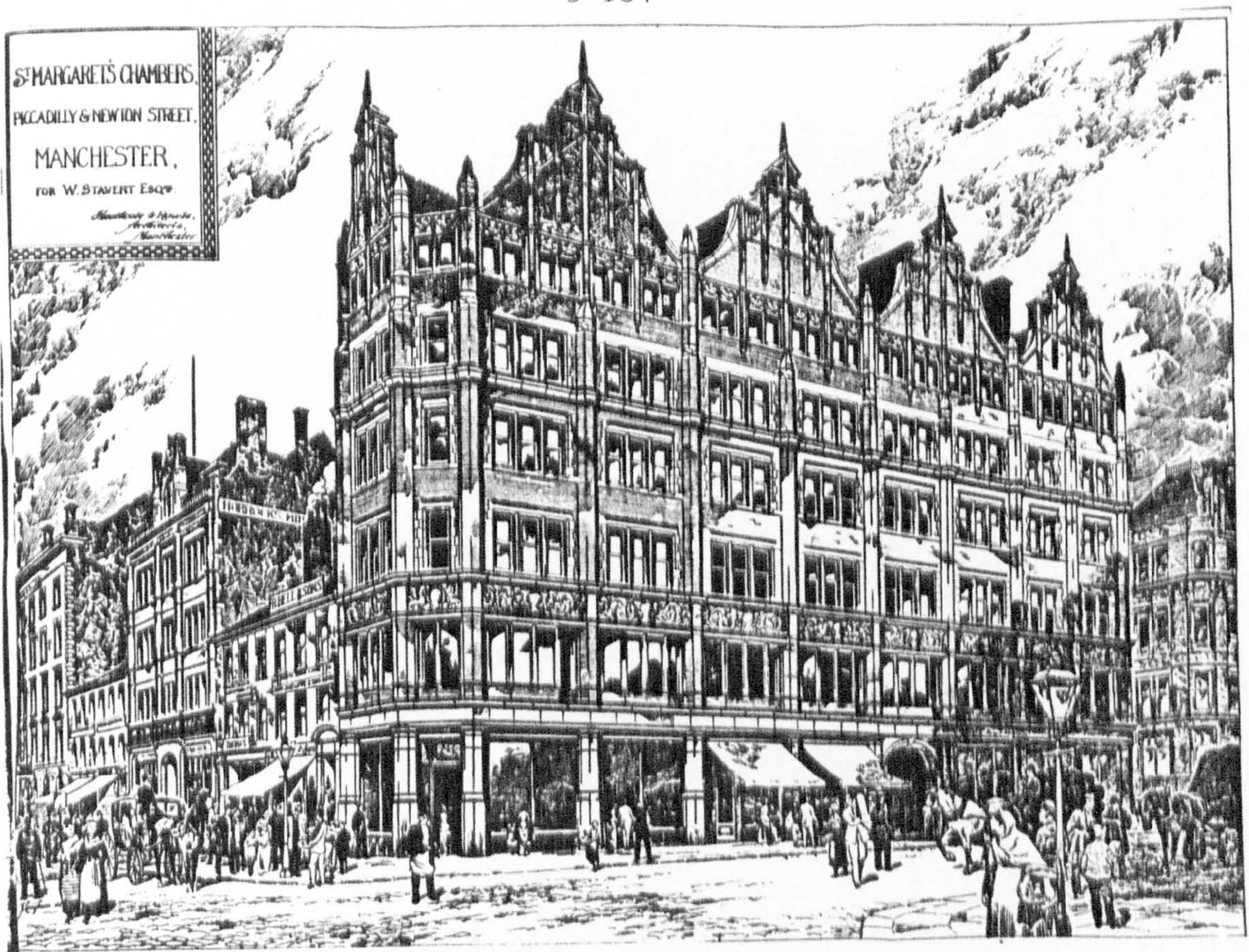


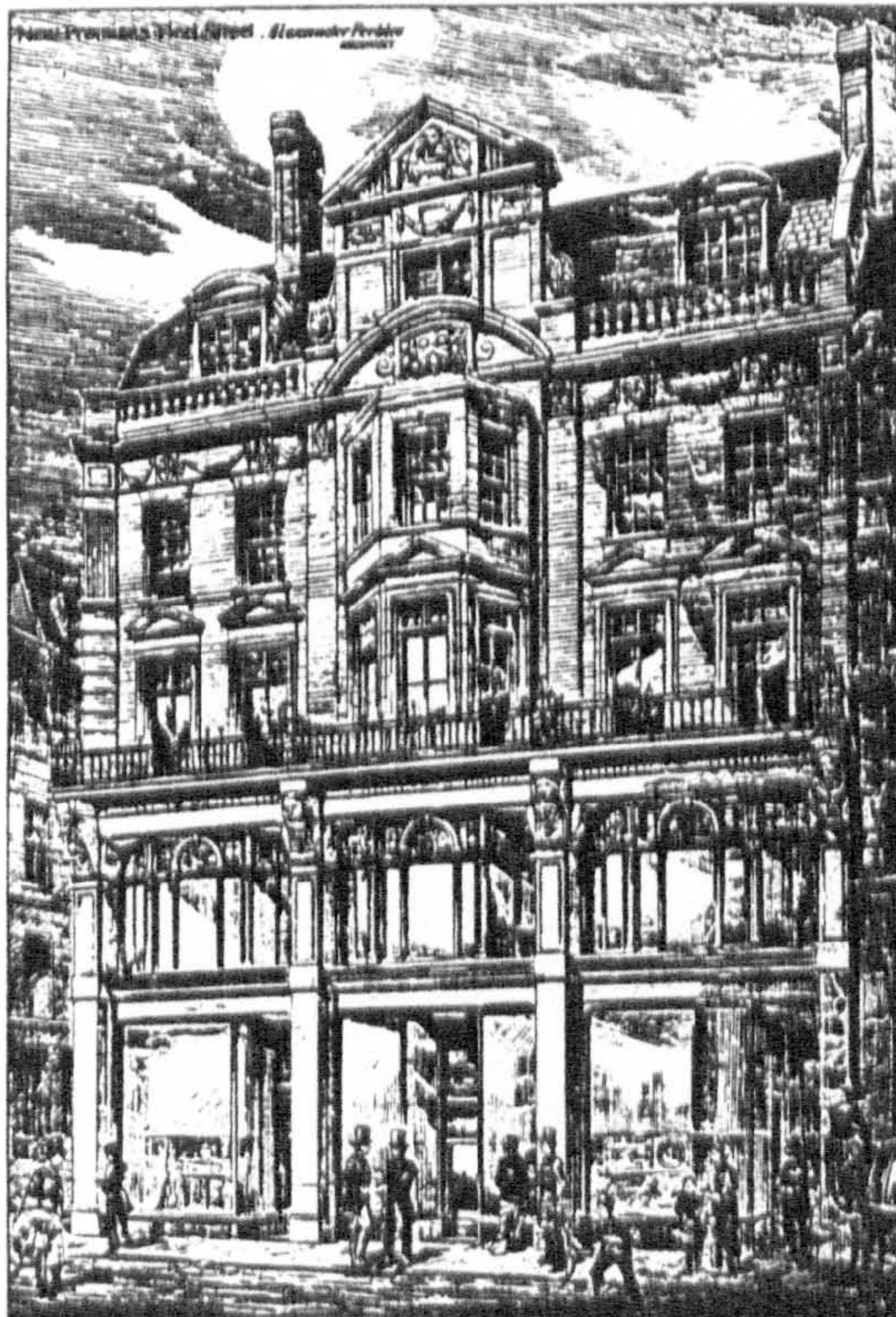
5-133

BALTIC HOUSE, City, 1888

ST. MARGARETS CHAMBERS, Manchester, 1889

5-134

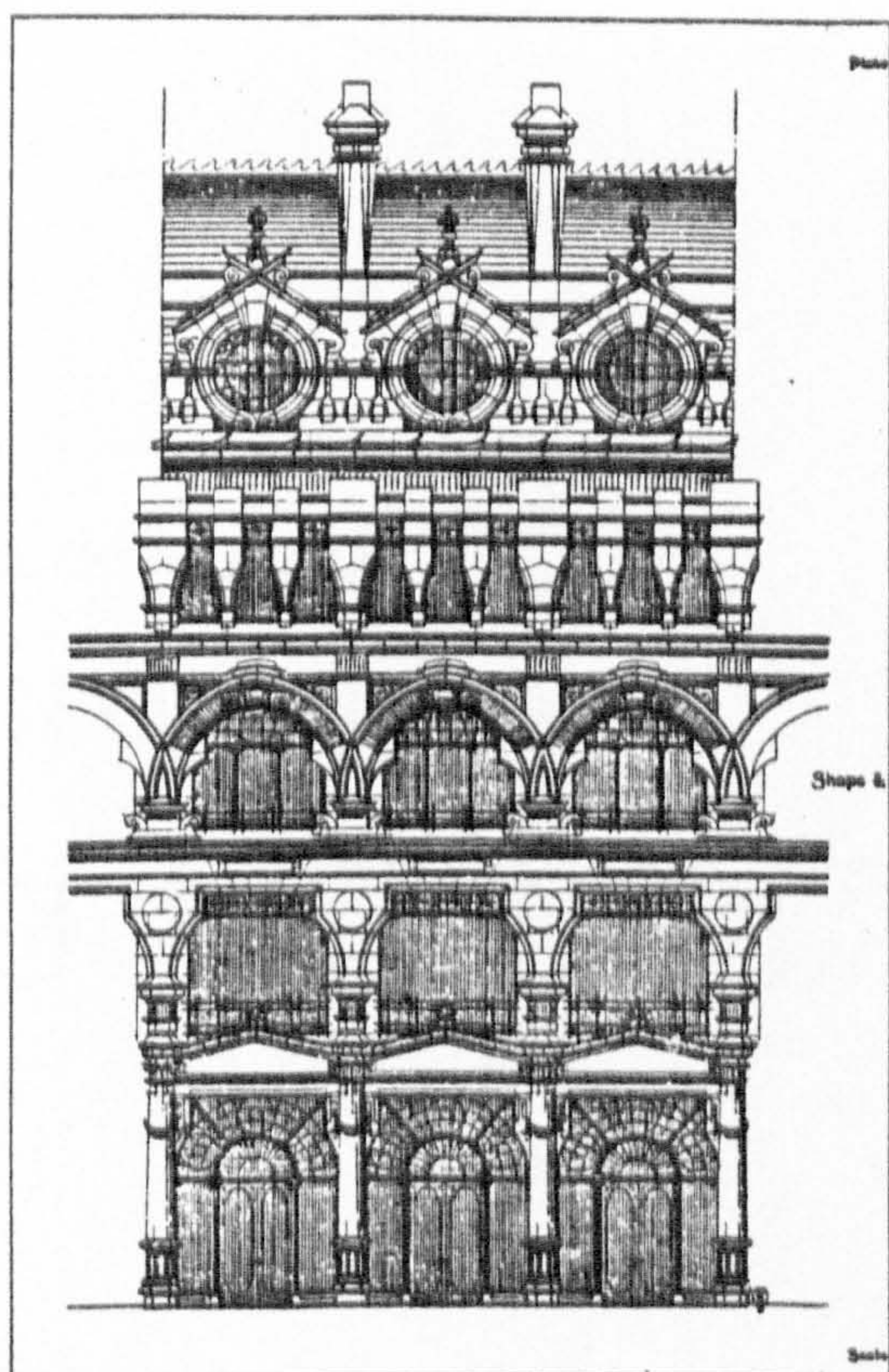




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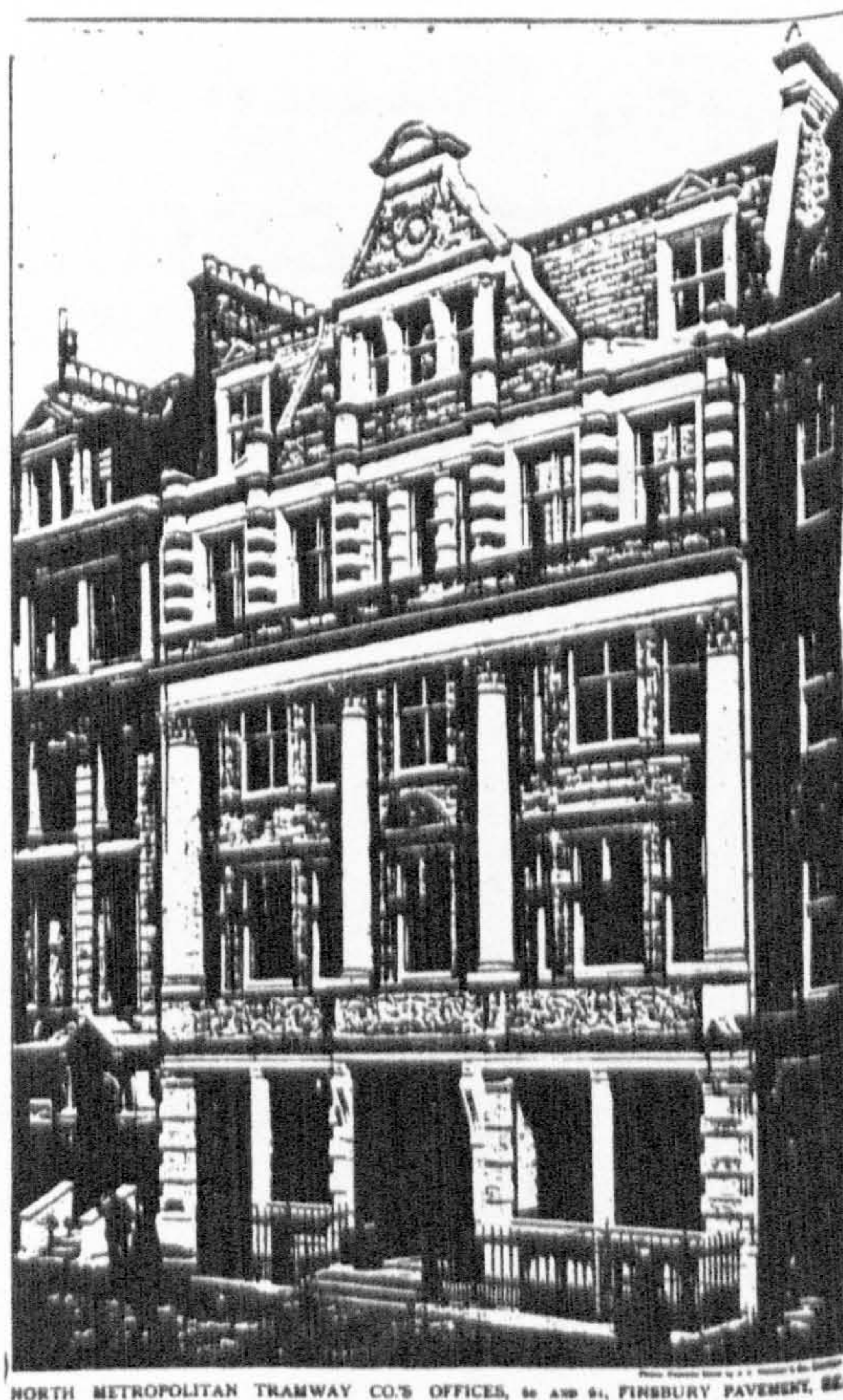
FLEET STREET OFFICES, City, 1879
SHOPS AND OFFICES DESIGN, 1876

5-136





5-137
 TELEGRAPH STREET OFFICES, City, 1882
 NORTH METROPOLITAN TRAMWAY CO. OFFICES, City, 1899
 5-138



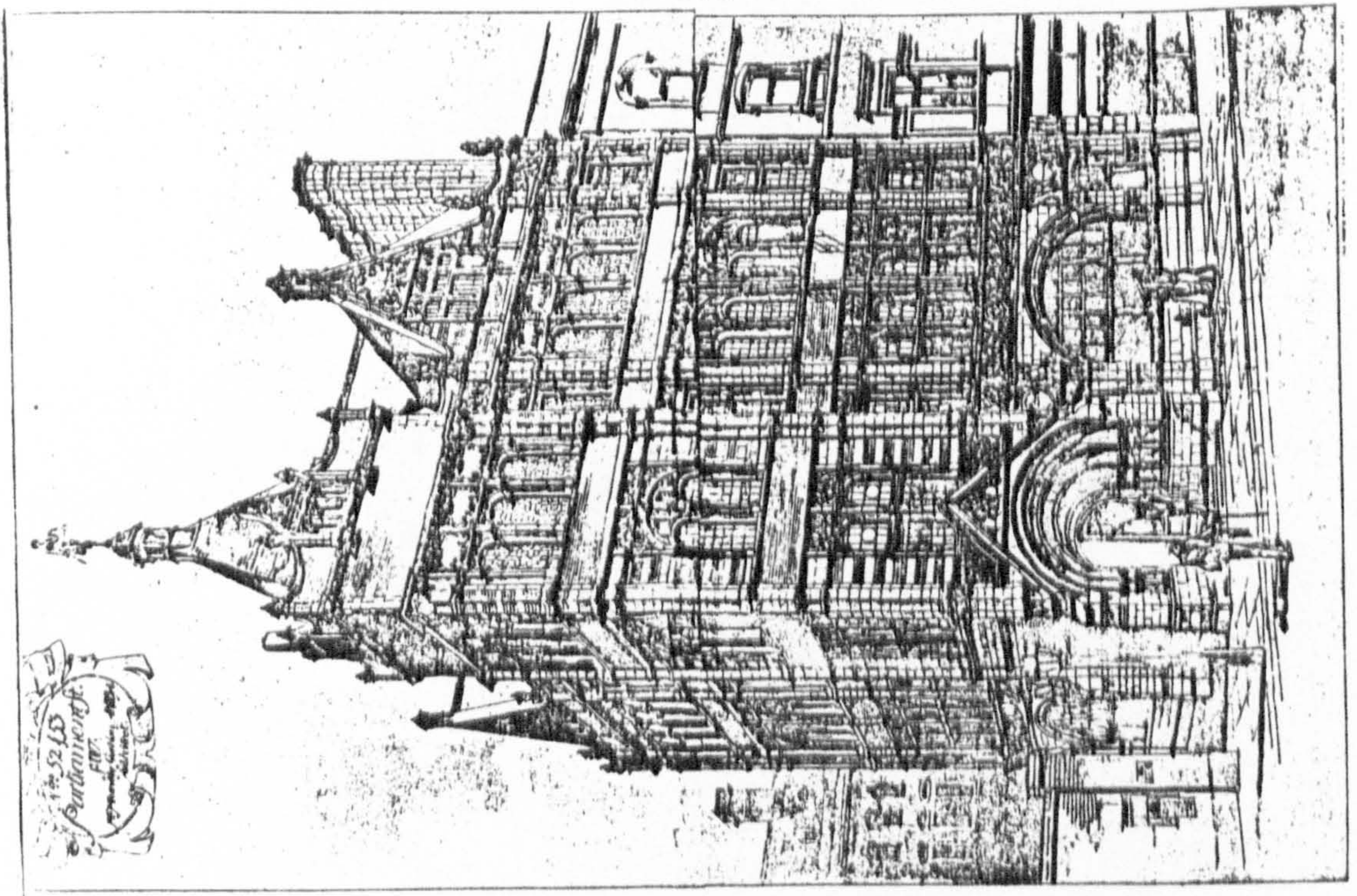


PROPOSED OFFICES IN FLEET STREET.
R.W. LEE F.S.A. ARCHT.

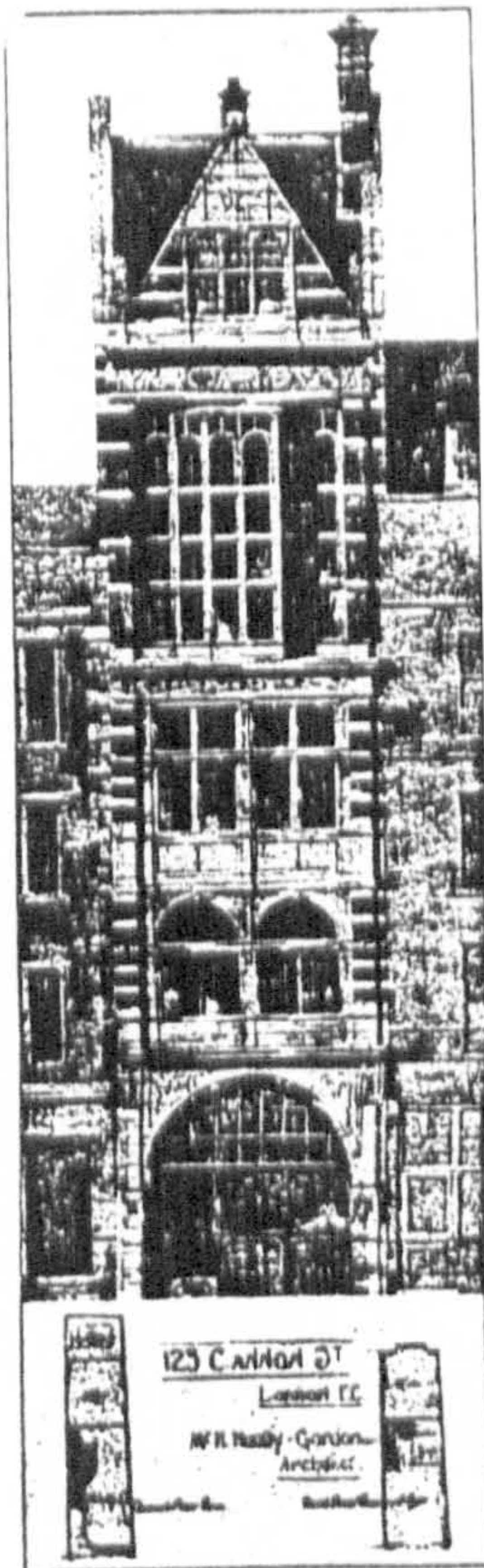
5-139

FLEET STREET OFFICES, City, 1882
52 & 53 PARLIAMENT ST., Westminster, 1893

5-140



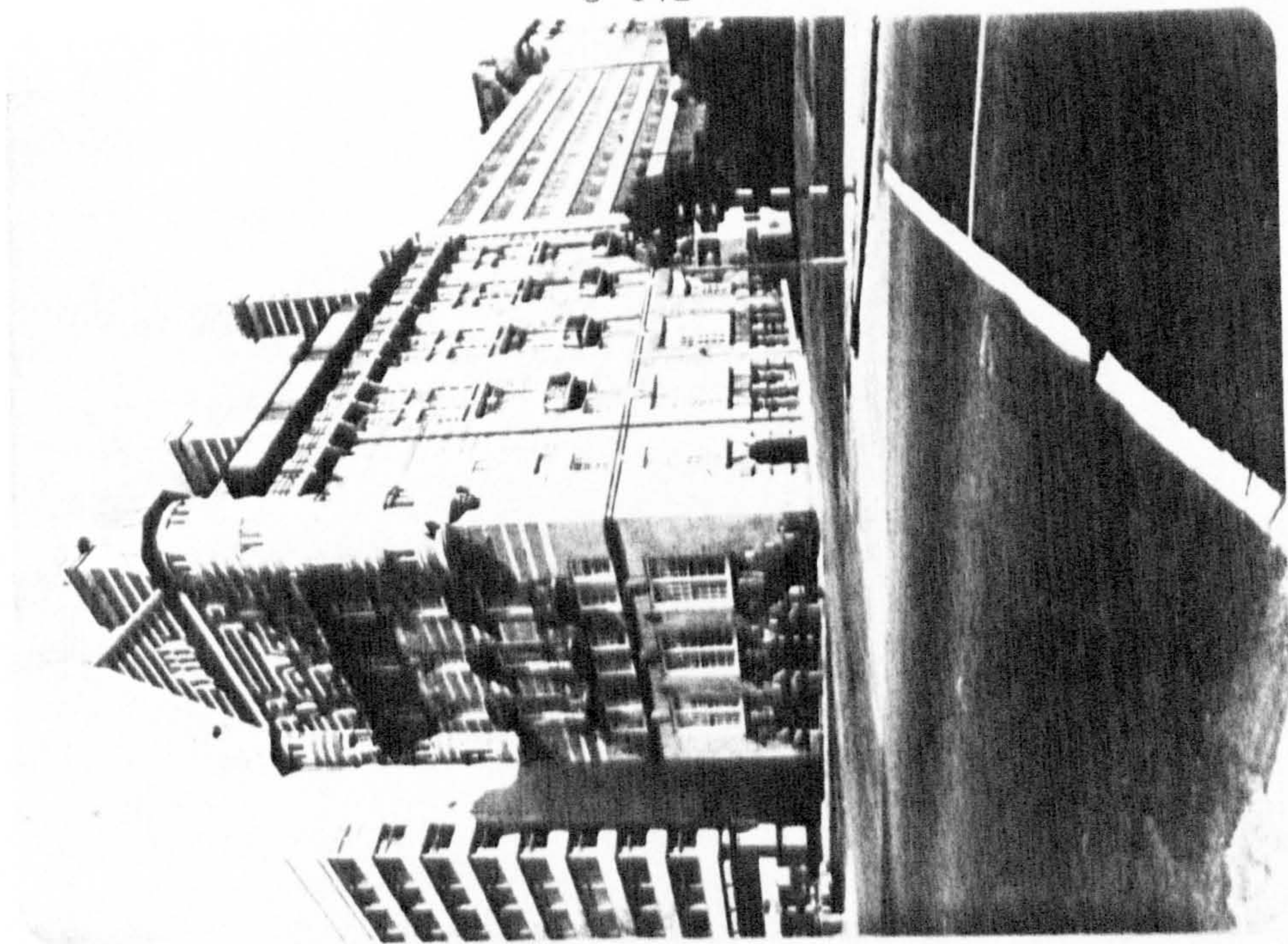
52 & 53
Parliament St.
F.W.
1893

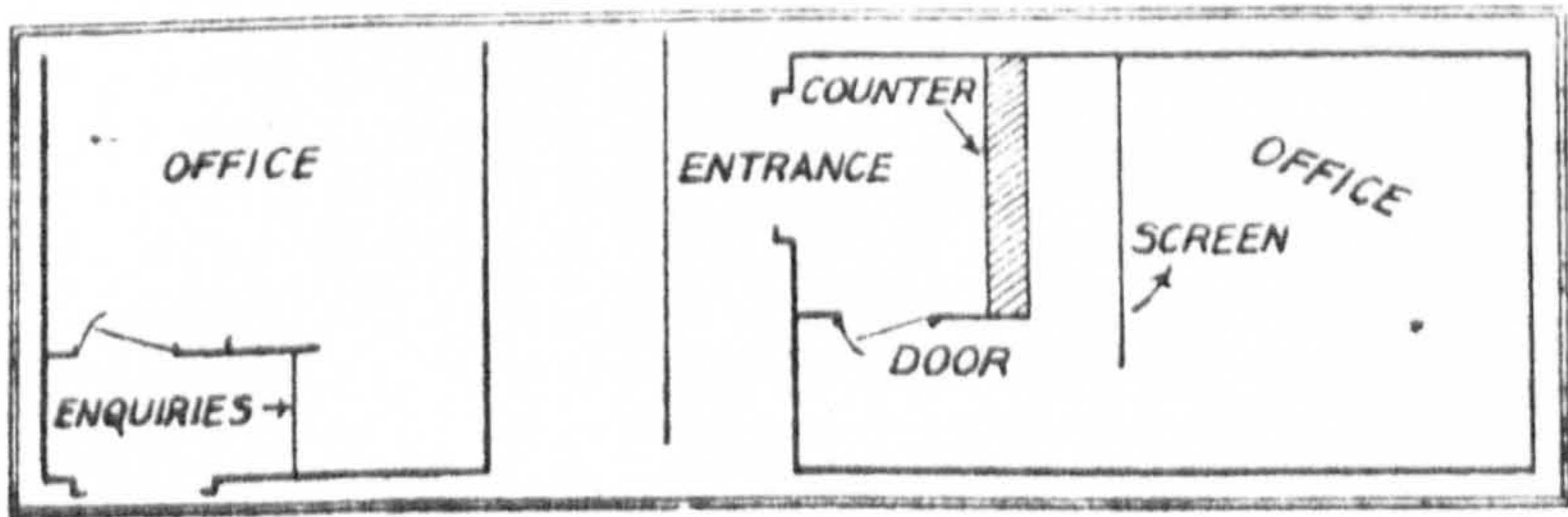


5-141

123 CANNON ST., City, 1895
WHITE STAR LINE, Liverpool, 1894

5-142





6-1
OFFICE DIAGRAM, 1906
FILES, 1906
6-2

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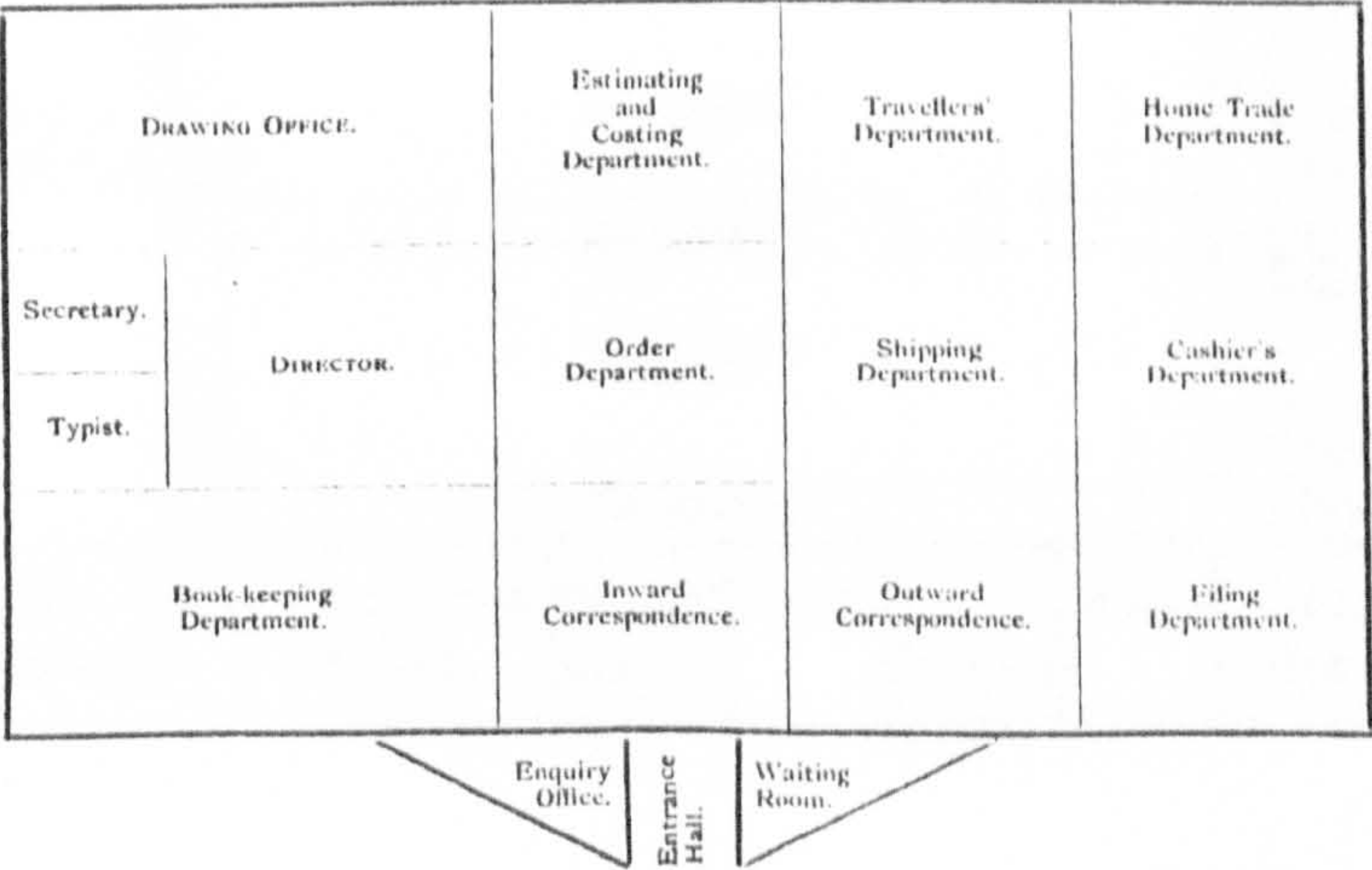
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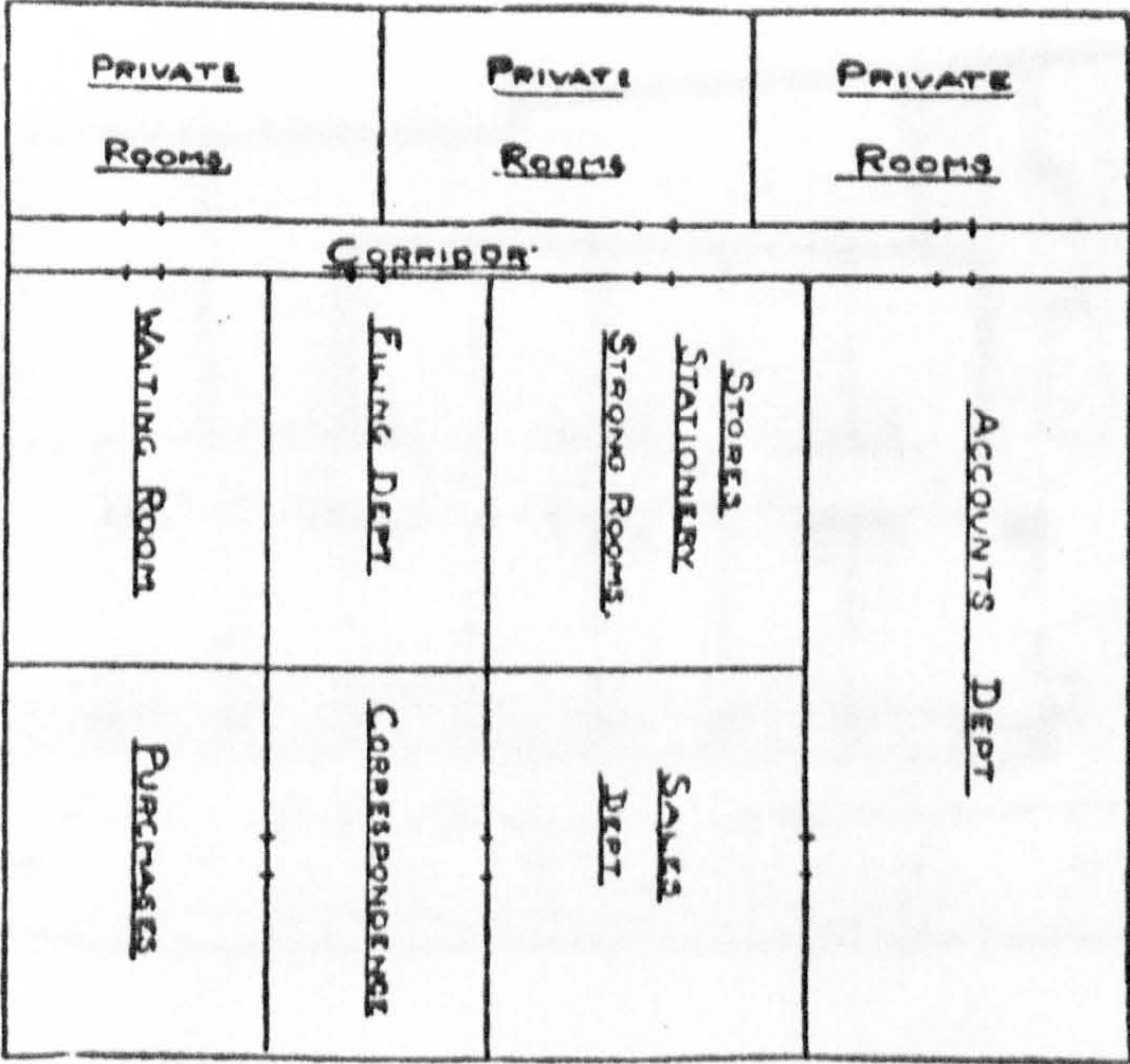


6-3

MODERN OFFICE, 1919

MODERN OFFICE, 1919

6-4



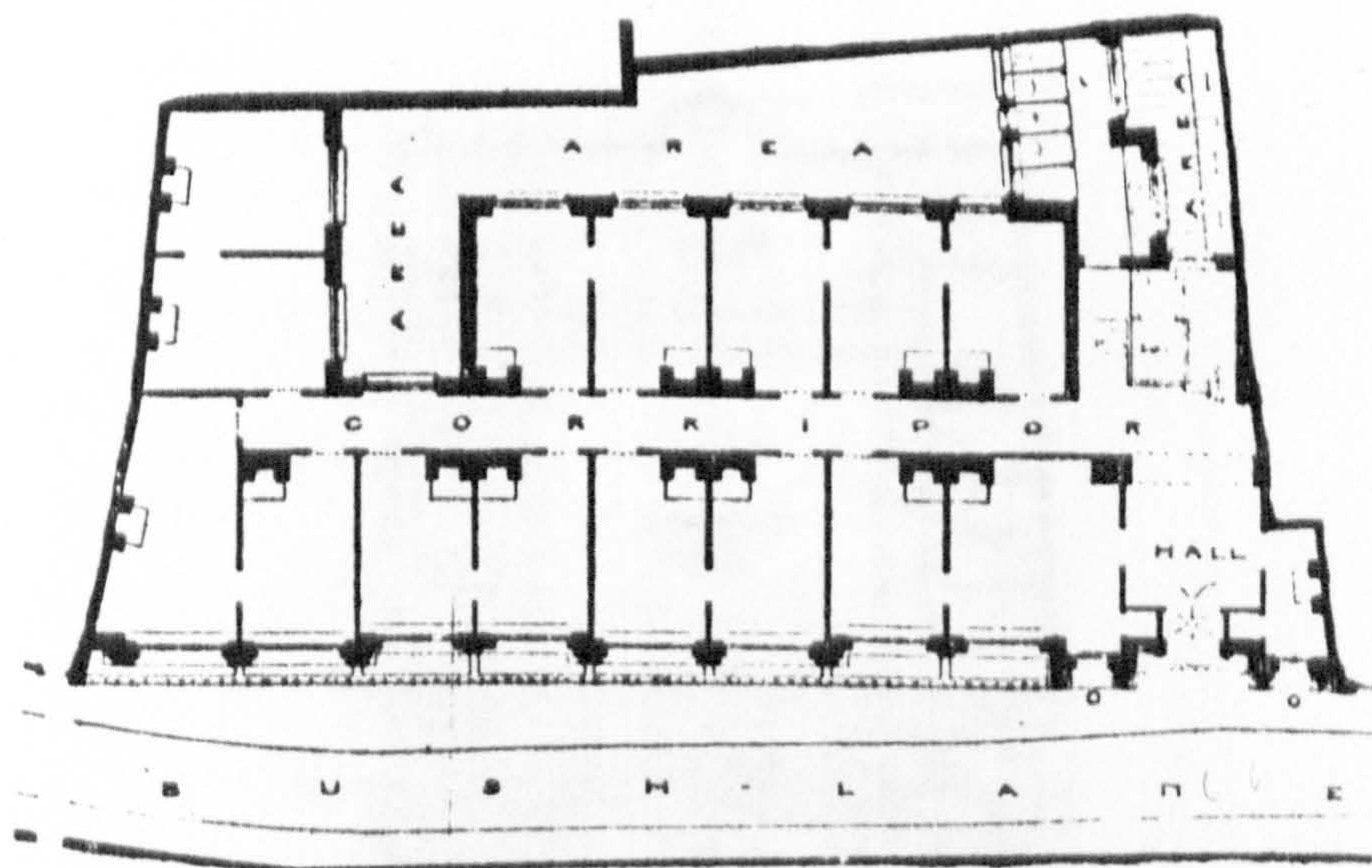
Typists	Filing	Telephone Operators	Cashier	Inquiry	Main Entrance
	Gangway				Waiting Room
Office Machinery	General				Managing Director
	Gangway				Secretary
	Gangway				Board Room
Cloak Rm. (Female)	Cloak Rm. (Male)	Chief Accnt	Credits Registrar	Buyer	Sales Mgr

6-5

MODERN OFFICE, 1933

BUSH LANE HOUSE, City, 1897

6-6





6-9

NORWICH UNION OFFICE, Norwich, 1907

BLACKFRIARS HOUSE, City, 1915

6-10

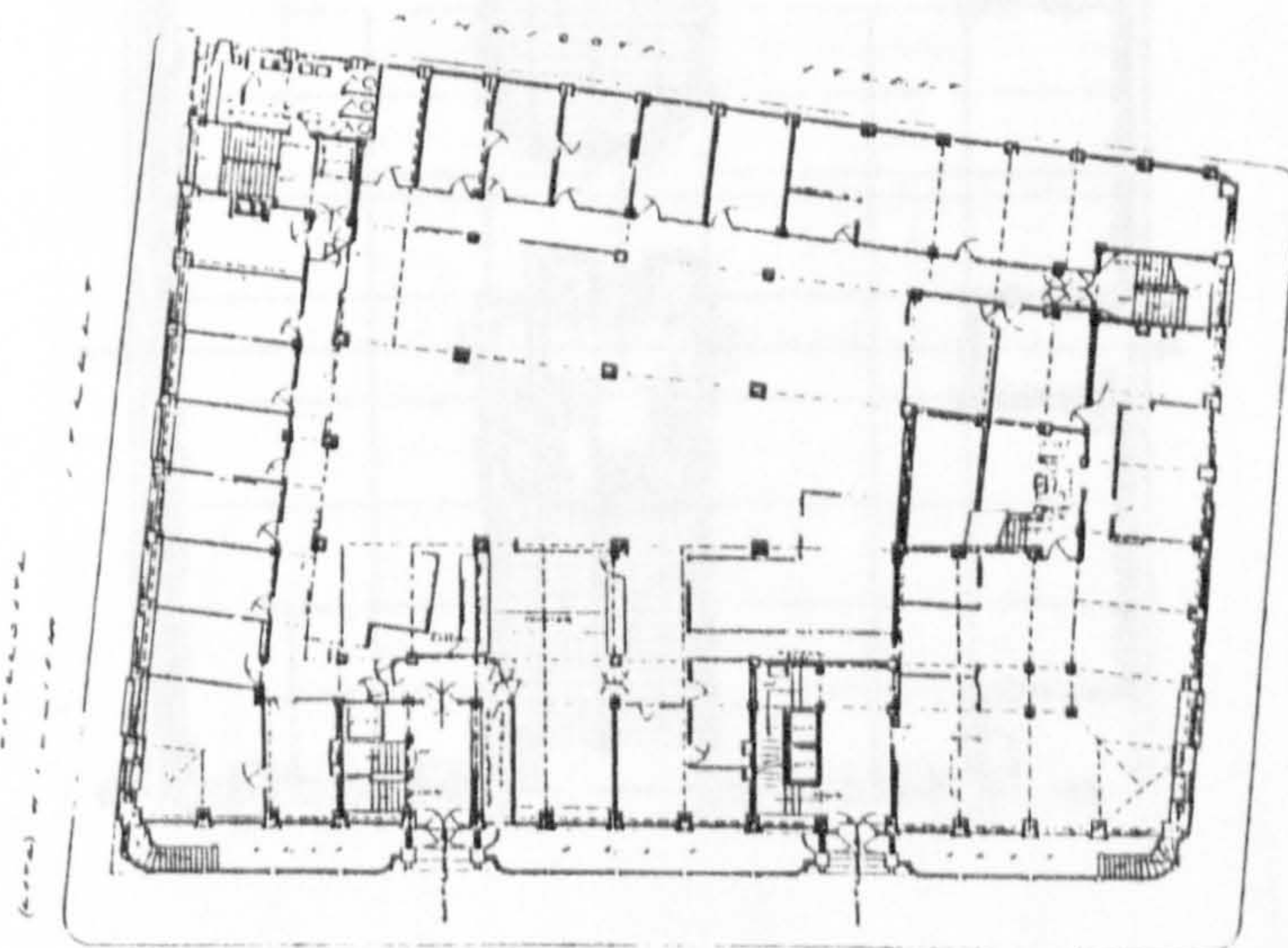


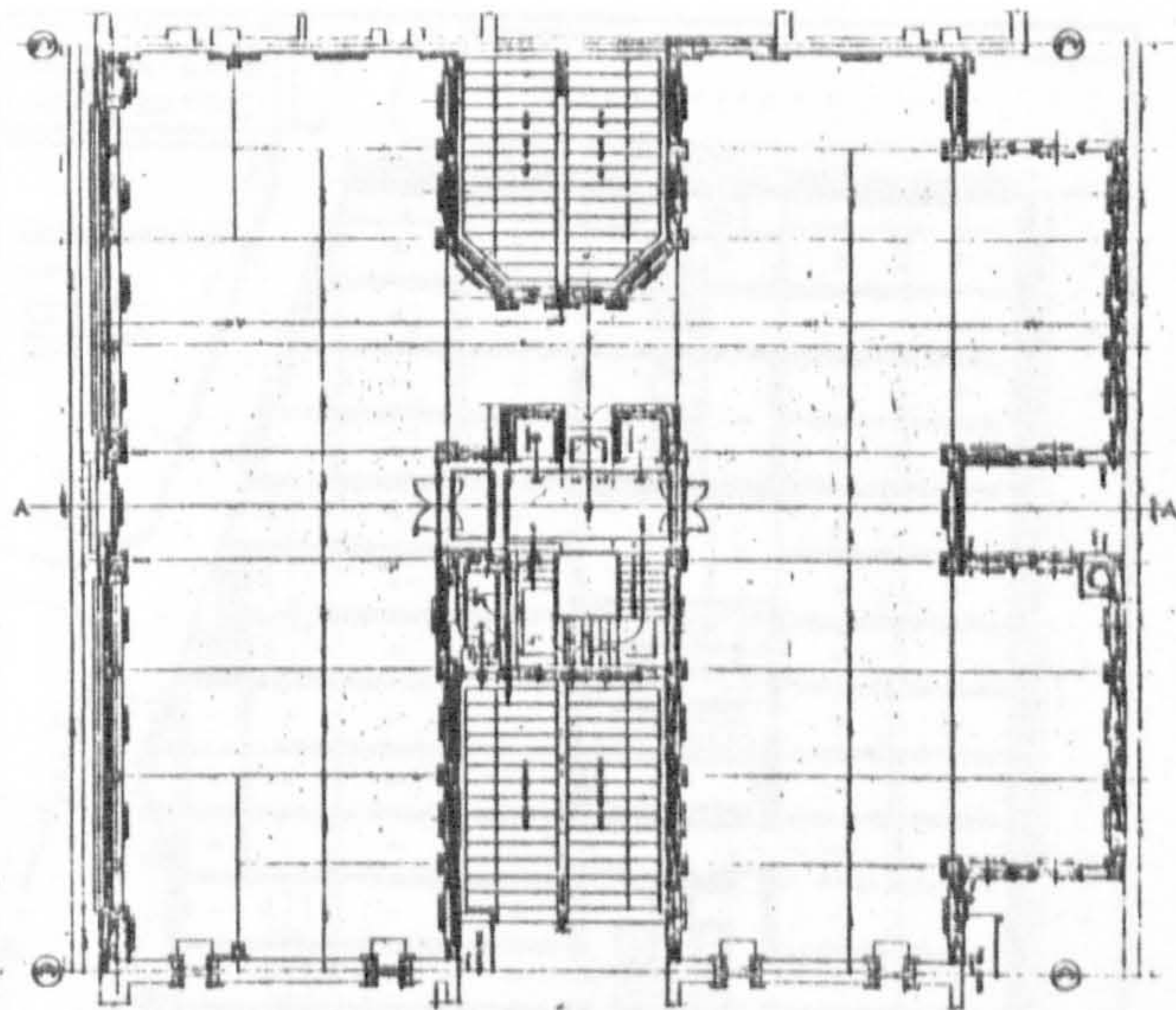


Fig. 6-11

6-11

WESLEYAN AND GENERAL ASSURANCE, Birmingham, 1905
CANADA HOUSE, Westminster, 1915

6-12



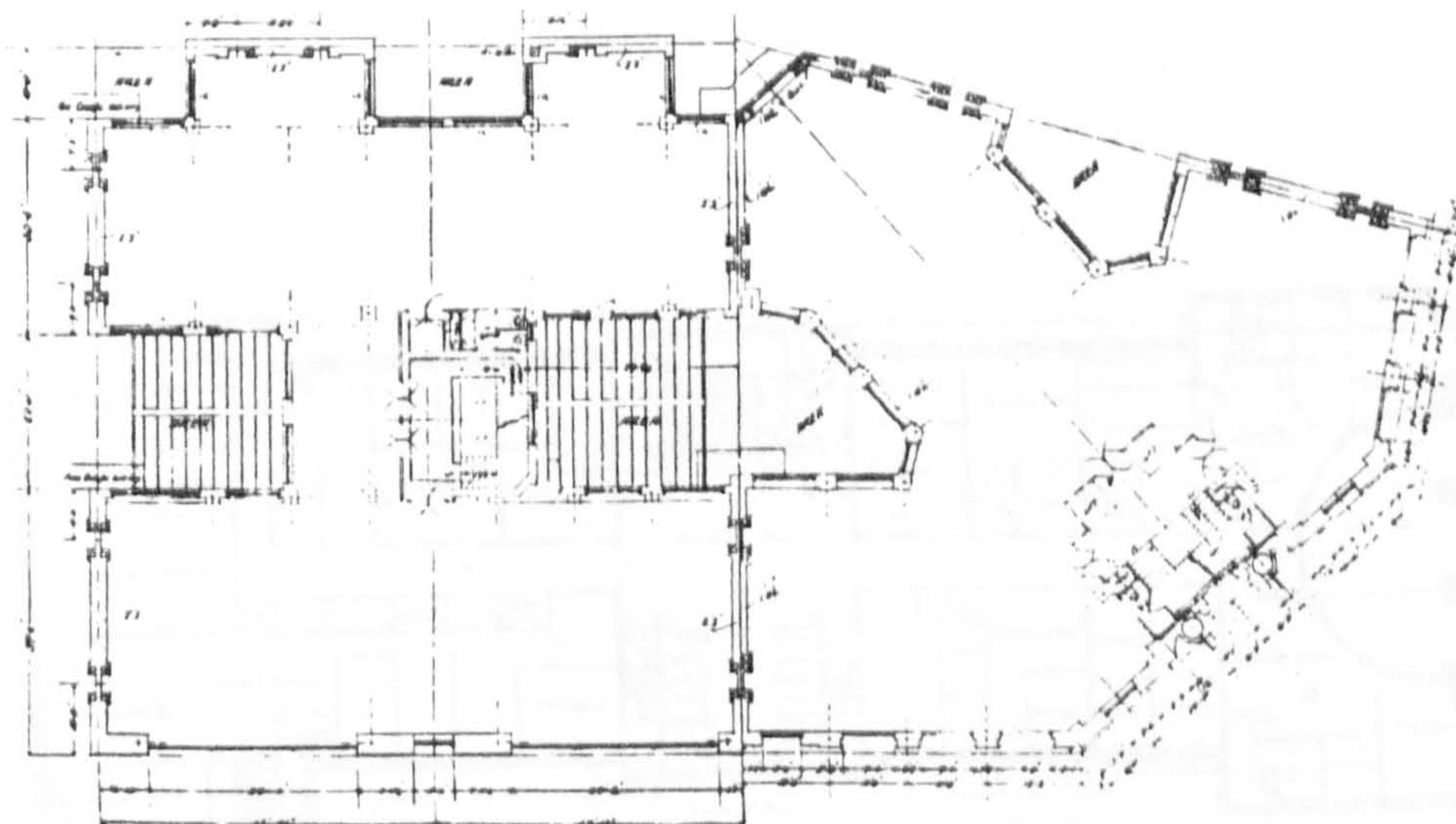


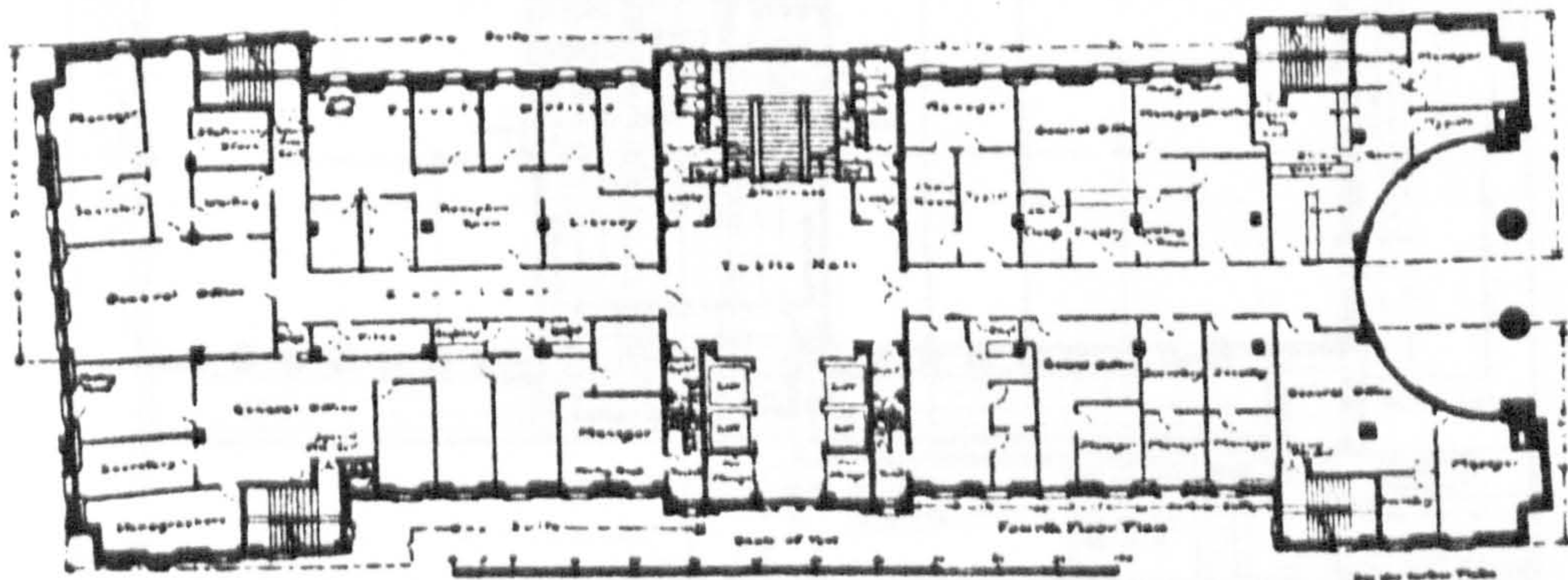
Fig. 1. Typical Floor Plan.

6-13

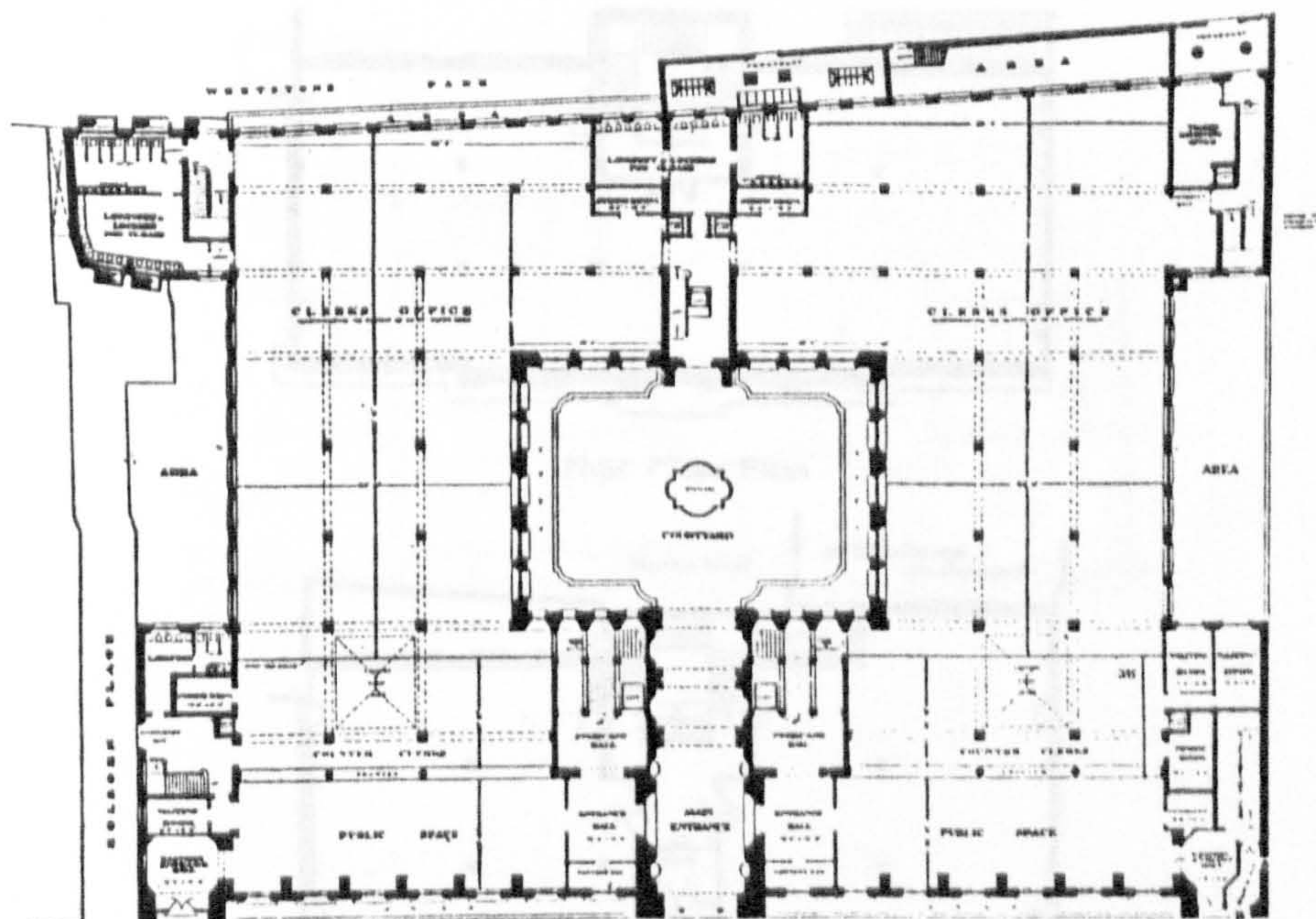
EMPIRE AND INDIA HOUSES, Westminster, 1915
AFRICA HOUSE, Westminster, 1922

6-14

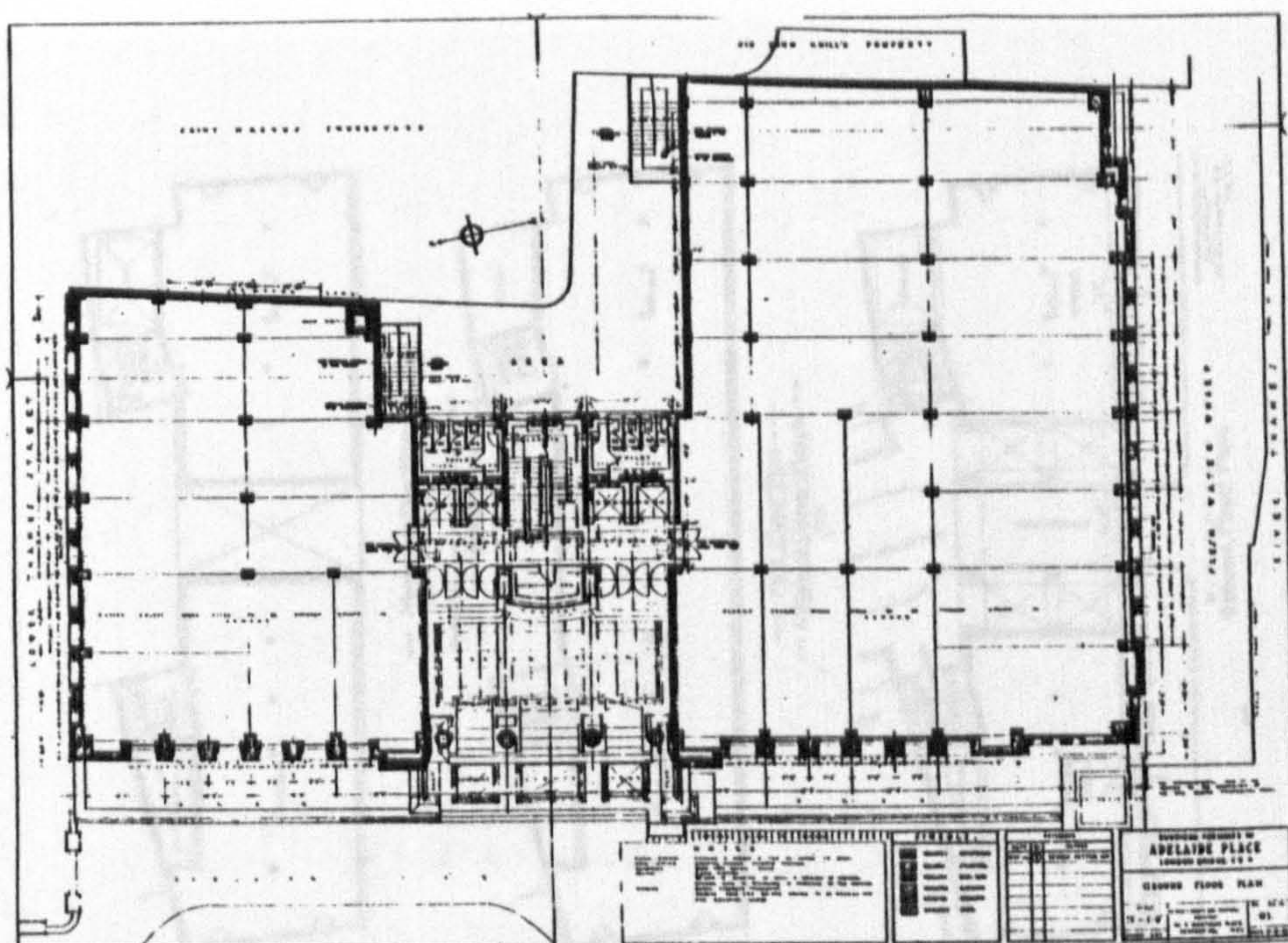




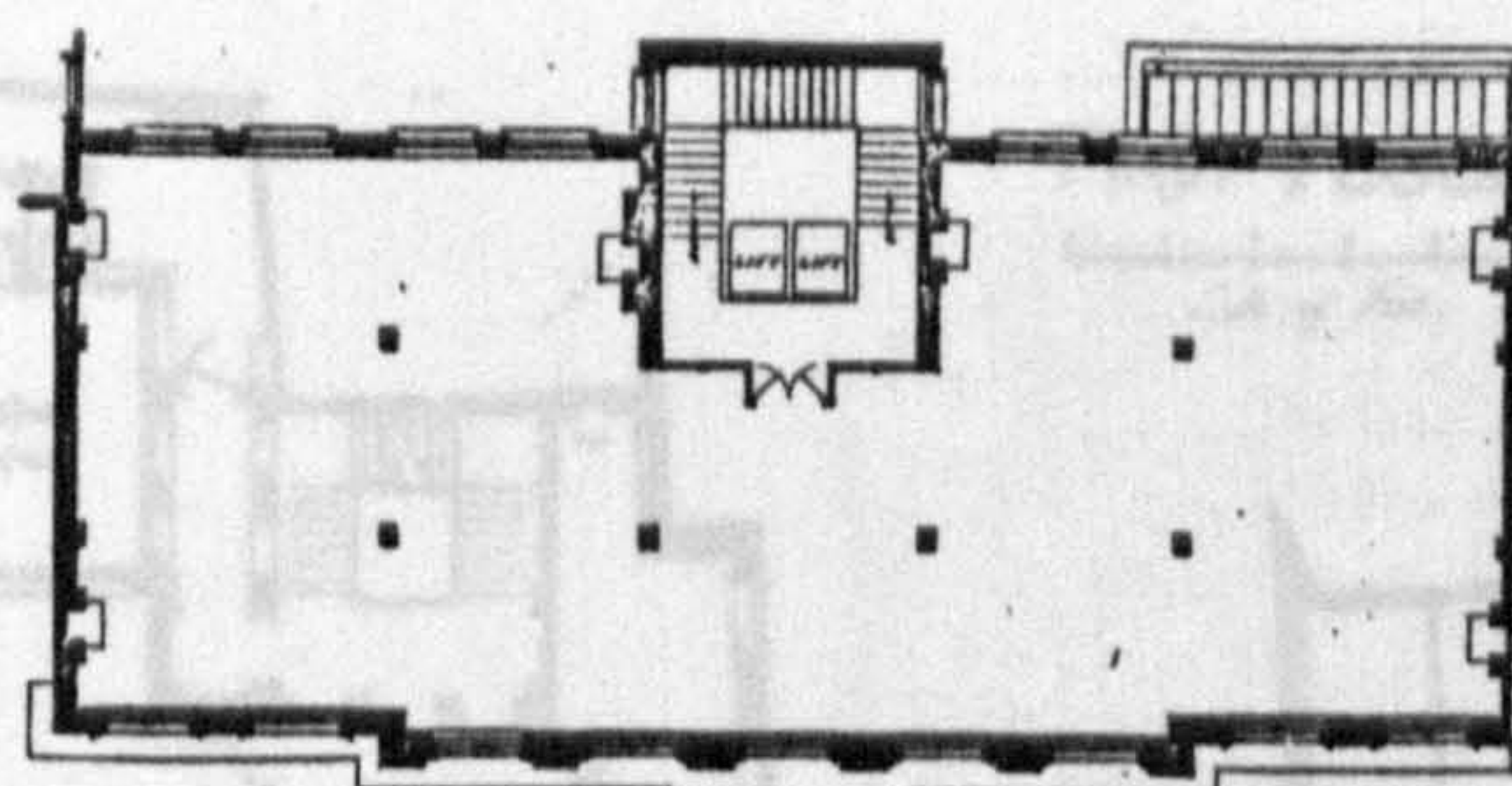
6-15
 BUSH HOUSE, Westminster, 1922
 PEARL ASSURANCE, Westminster, 1913
 6-16



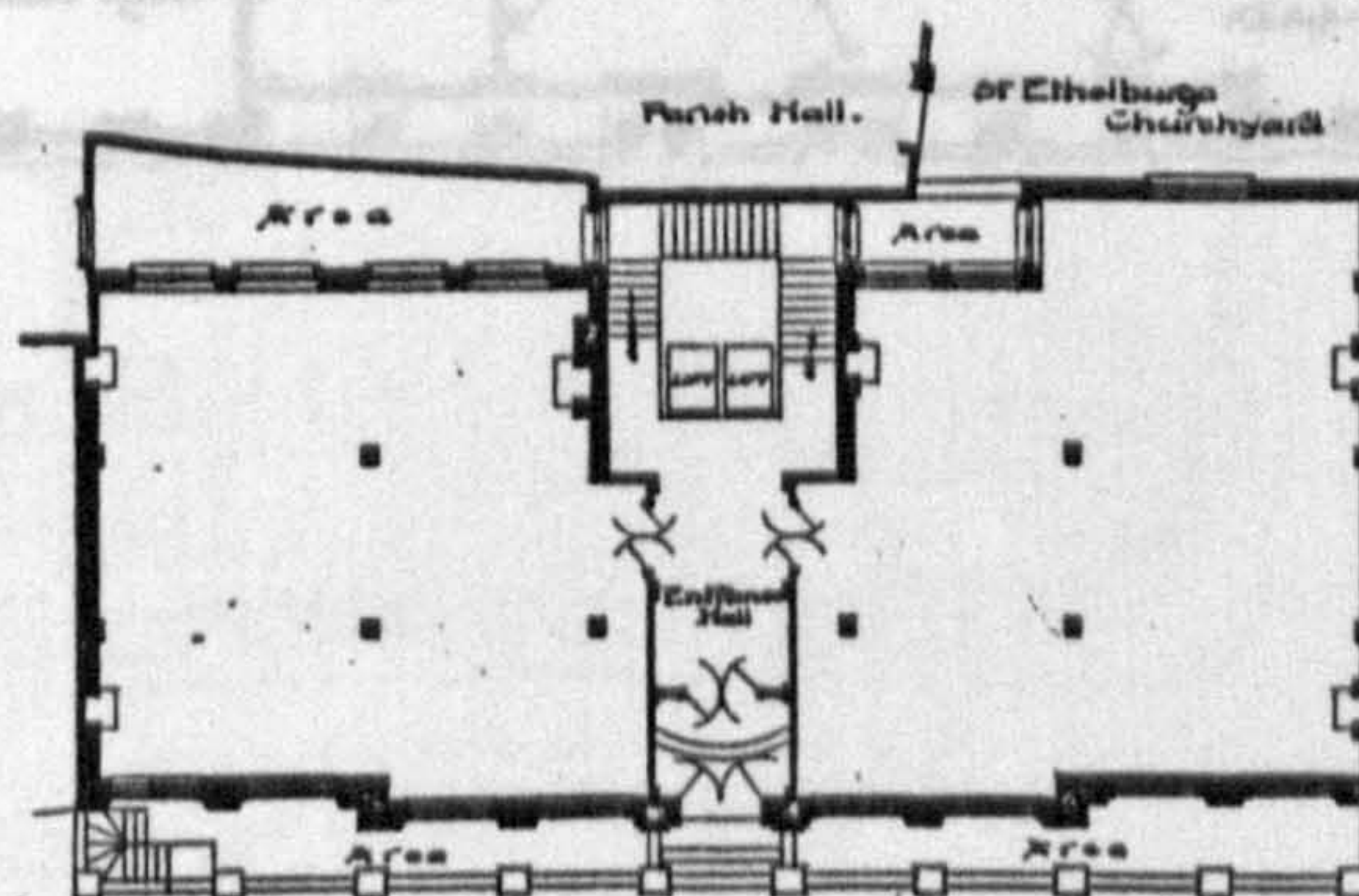
Ground Floor.
 Head Office for the Pearl Assurance Company, High Holborn.



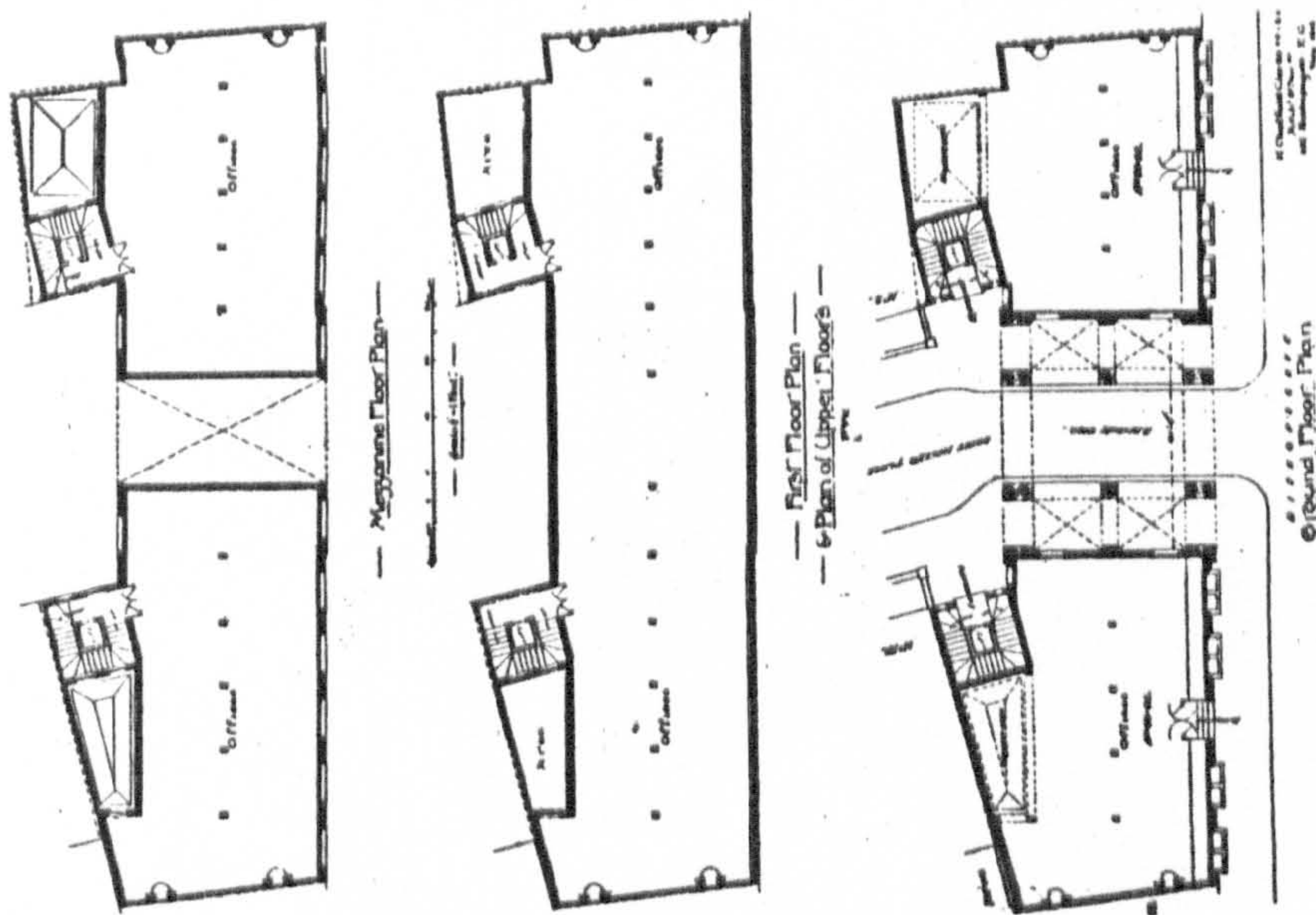
6-17
 ADELAIDE HOUSE, City, 1921
 17 ST. HELEN'S PLACE, City, 1913
 6-18



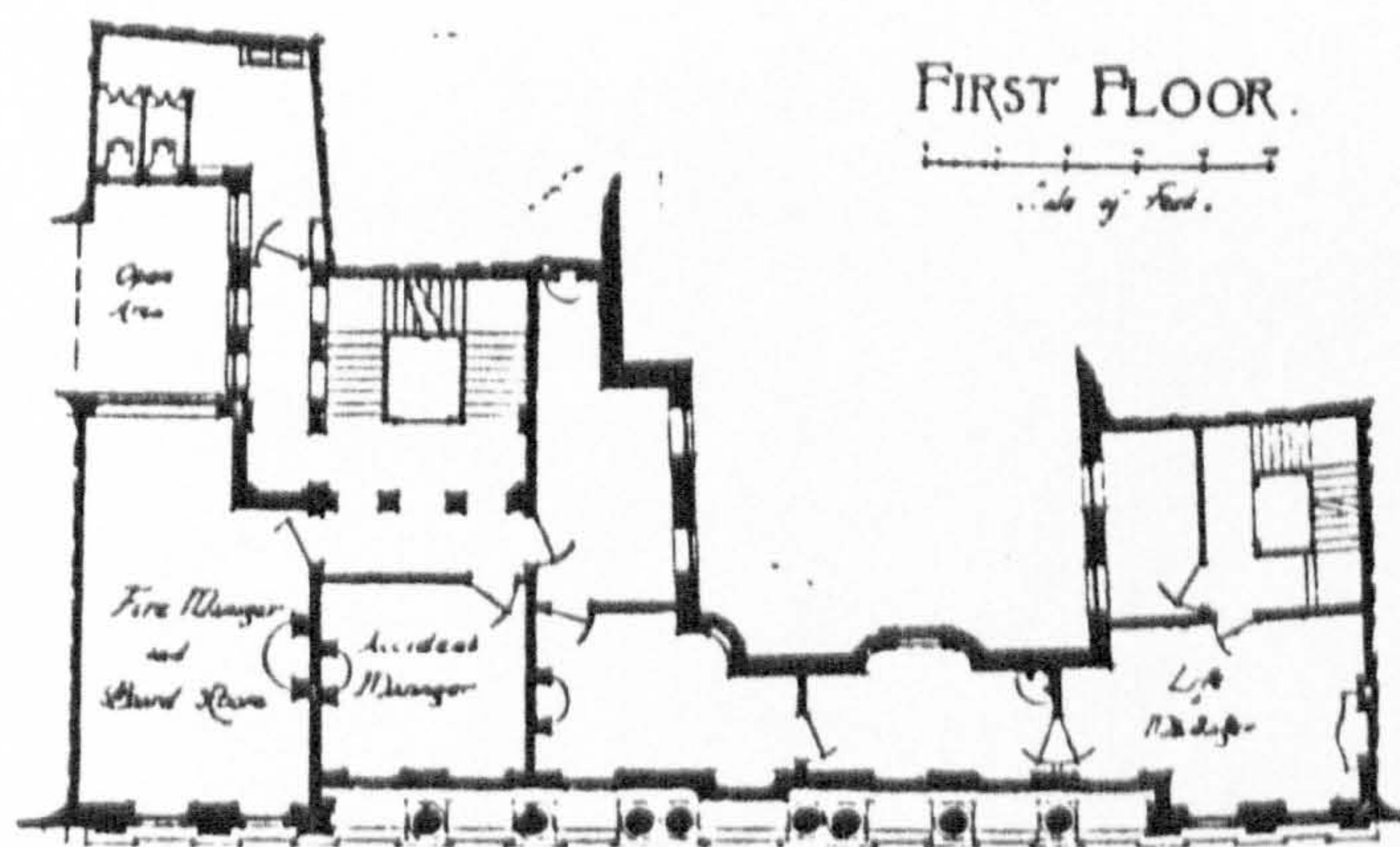
First Floor Plan

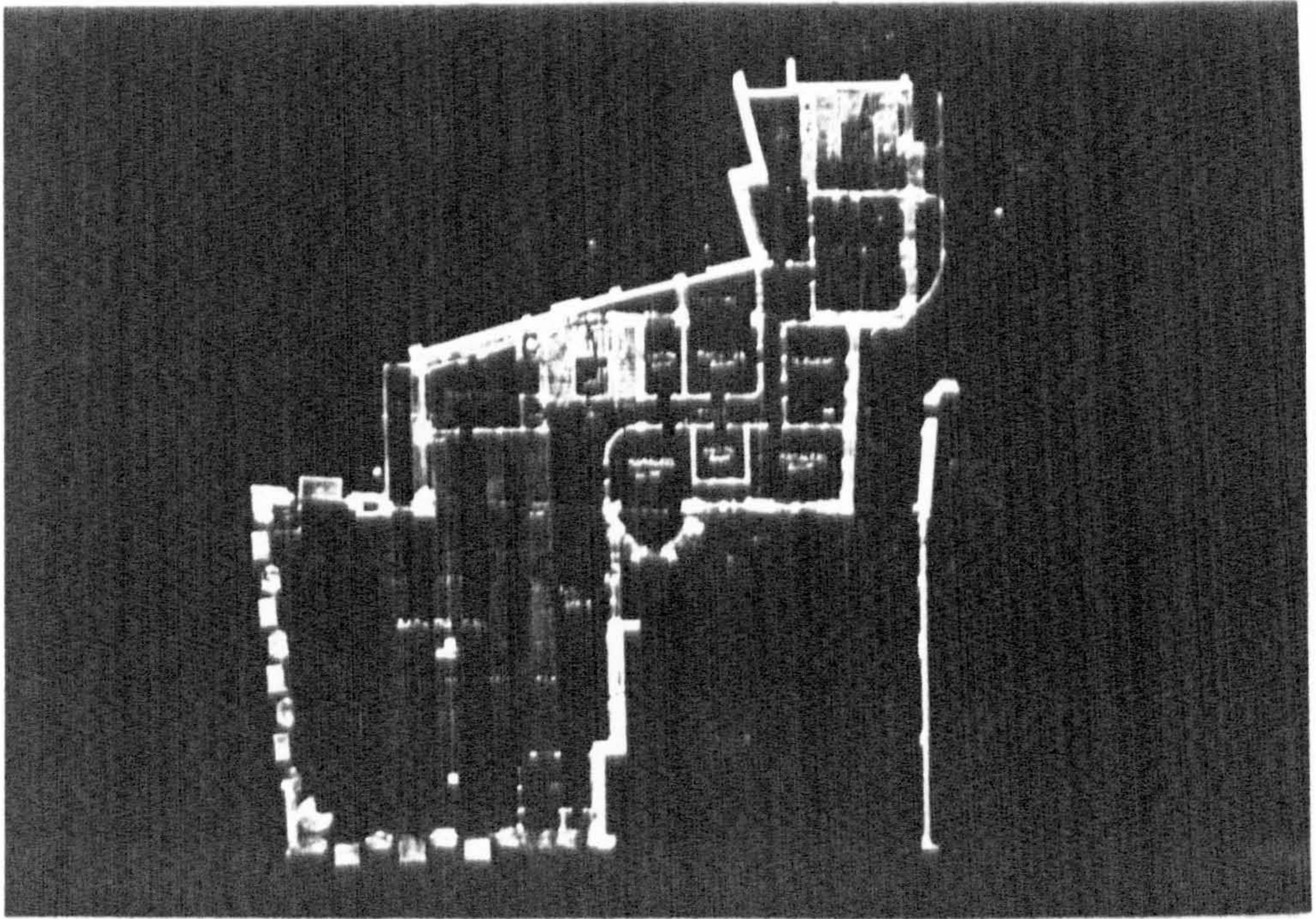


GROUND FLOOR PLAN



6-19
LEATHERSELLERS OFFICES, City, 1914
NORWICH UNION OFFICE, City, 1914
6-20

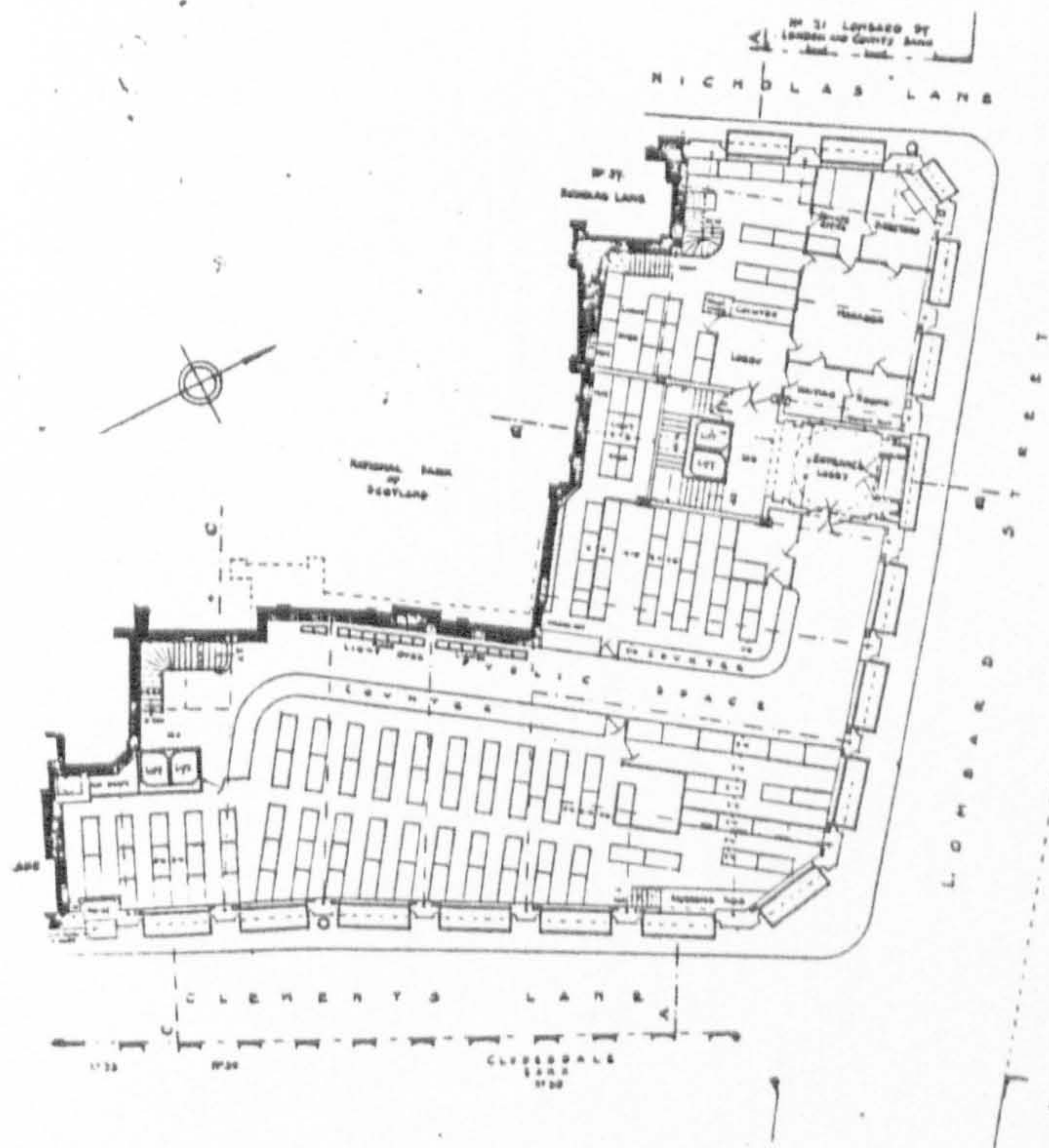


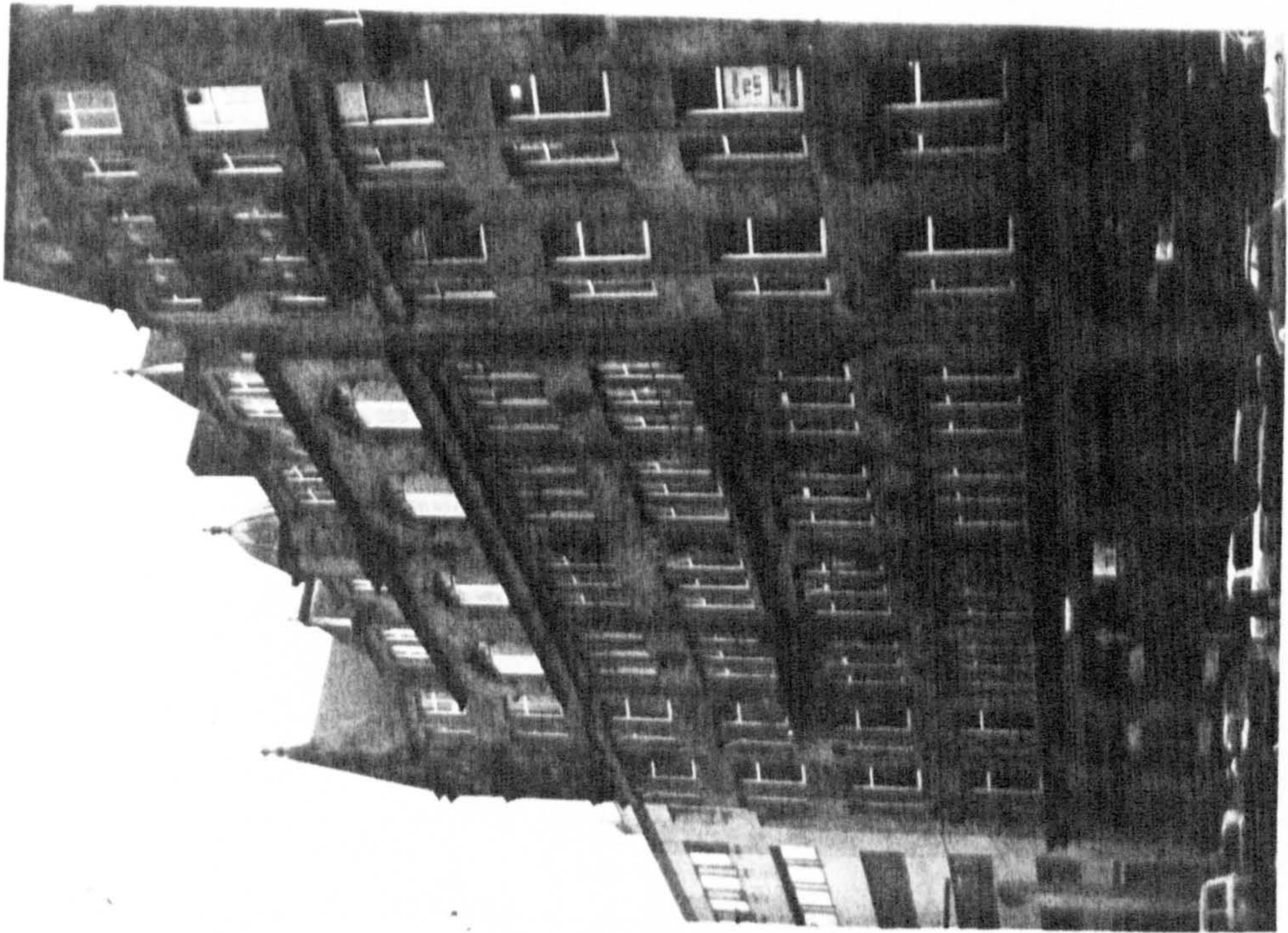


6-21

CHARTERED BANK OF INDIA, AUSTRALIA AND CHINA, City, 1911
ROYAL INSURANCE BUILDING, City, 1912

6-22

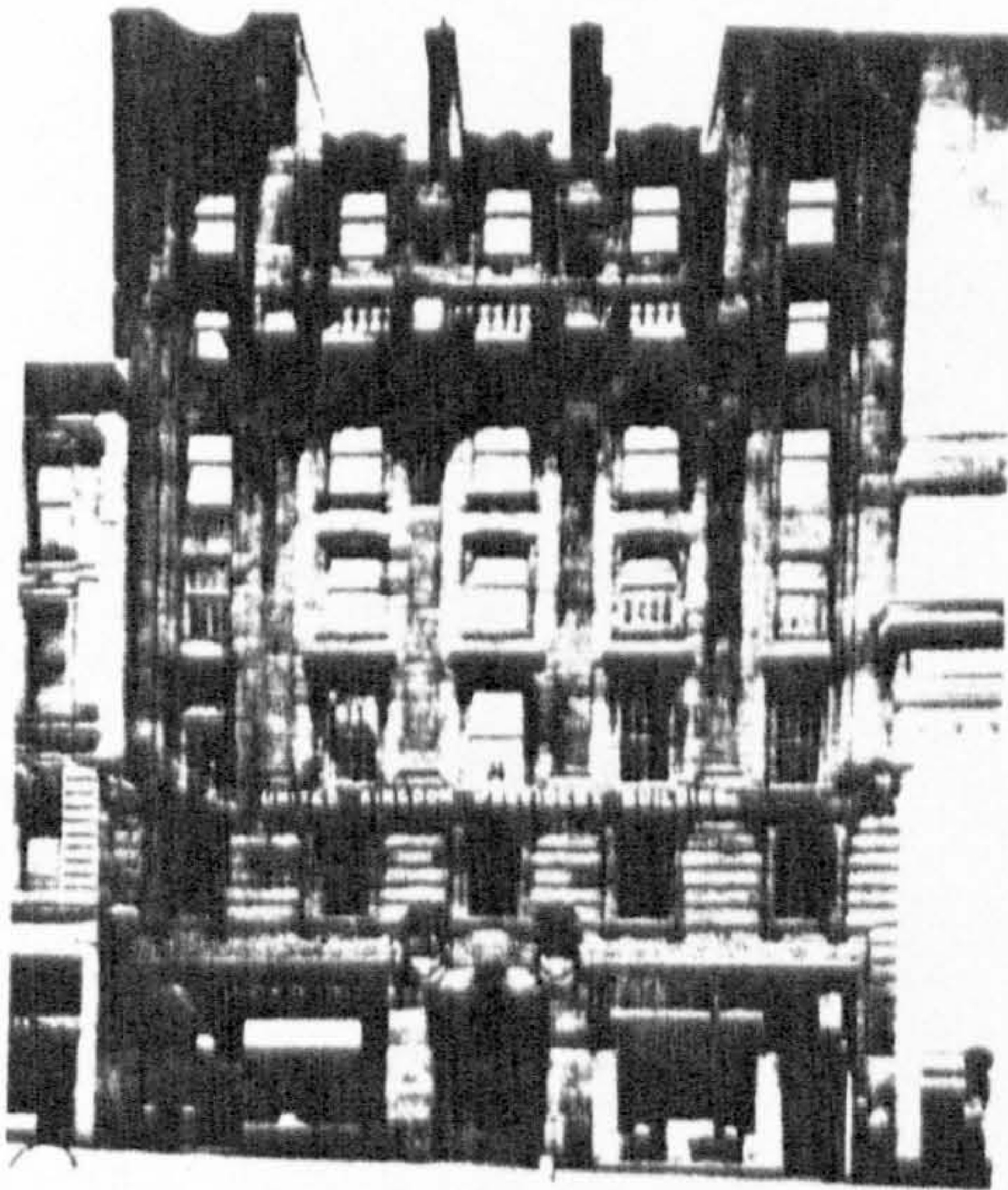


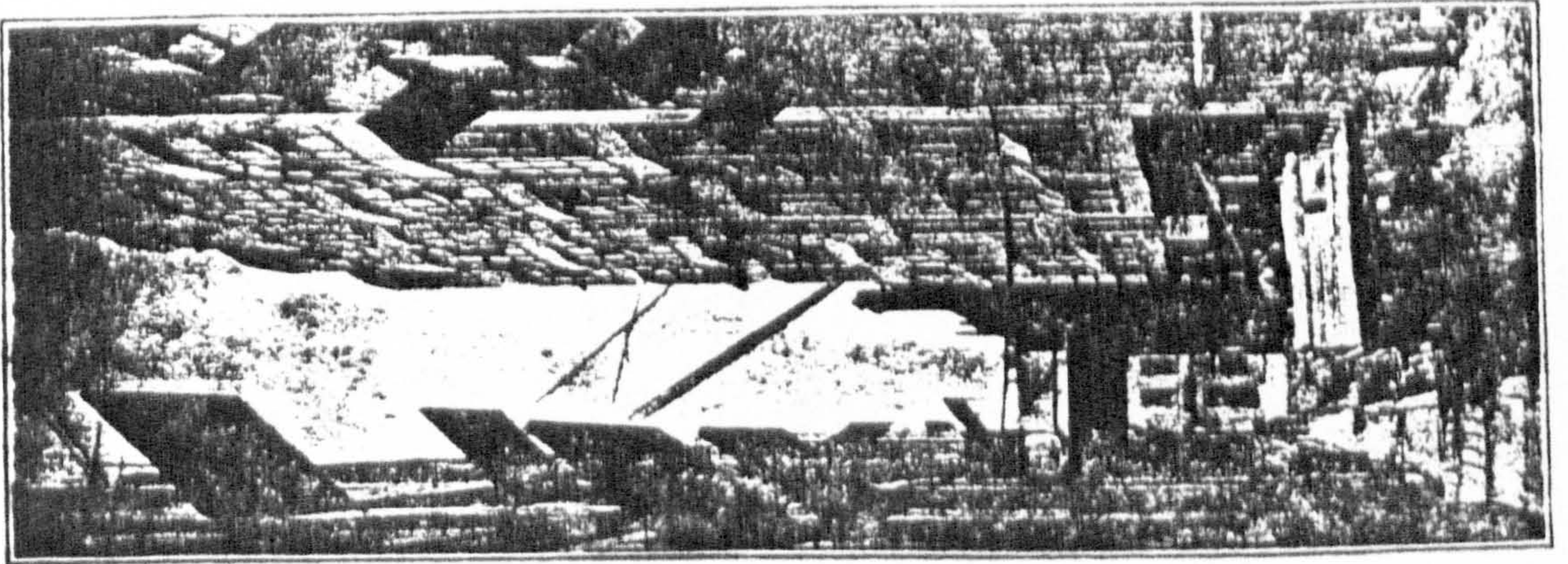


6-23

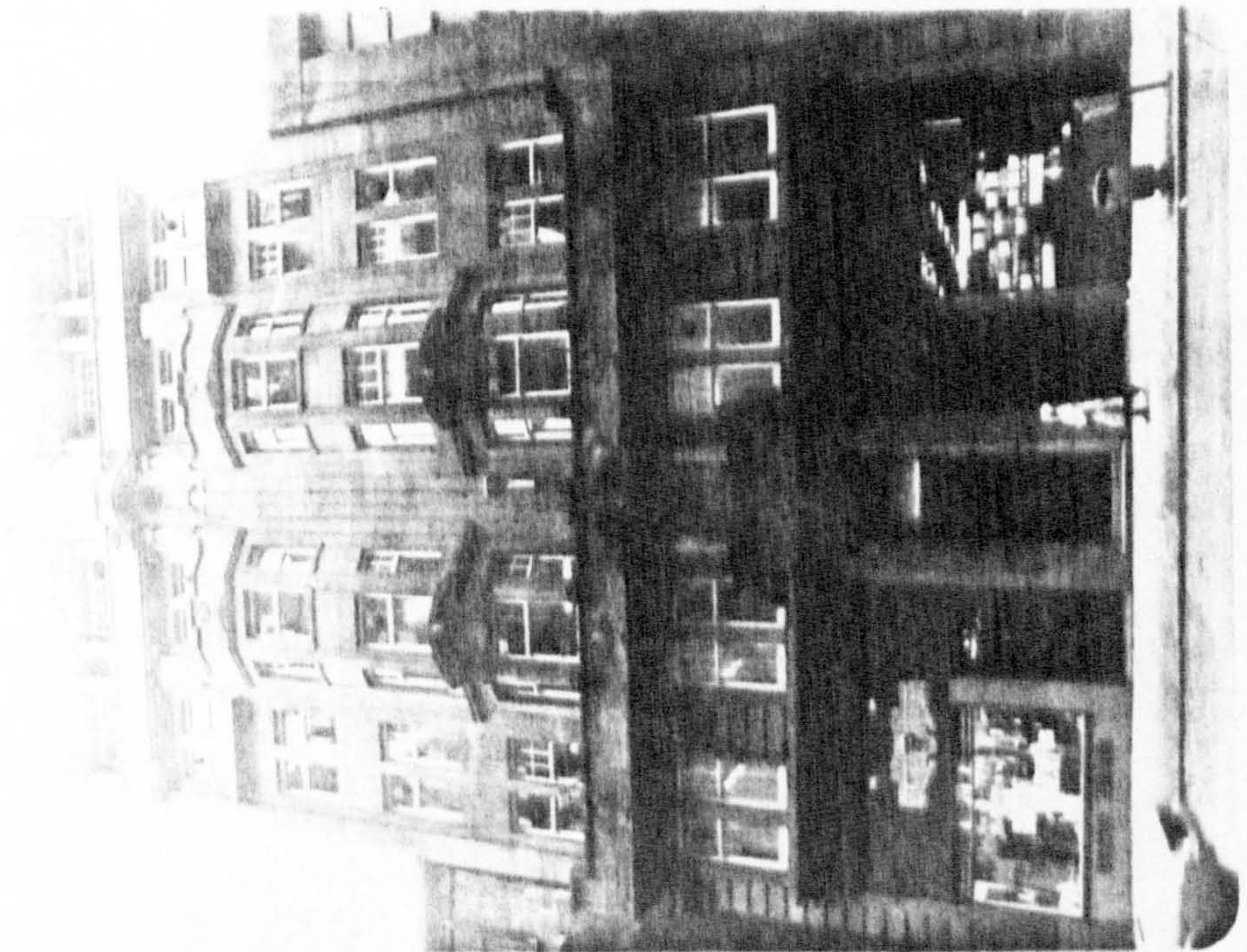
MERCANTILE CHAMBERS, Glasgow, 1897
EDINBURGH LIFE ASSURANCE, Glasgow, 1904

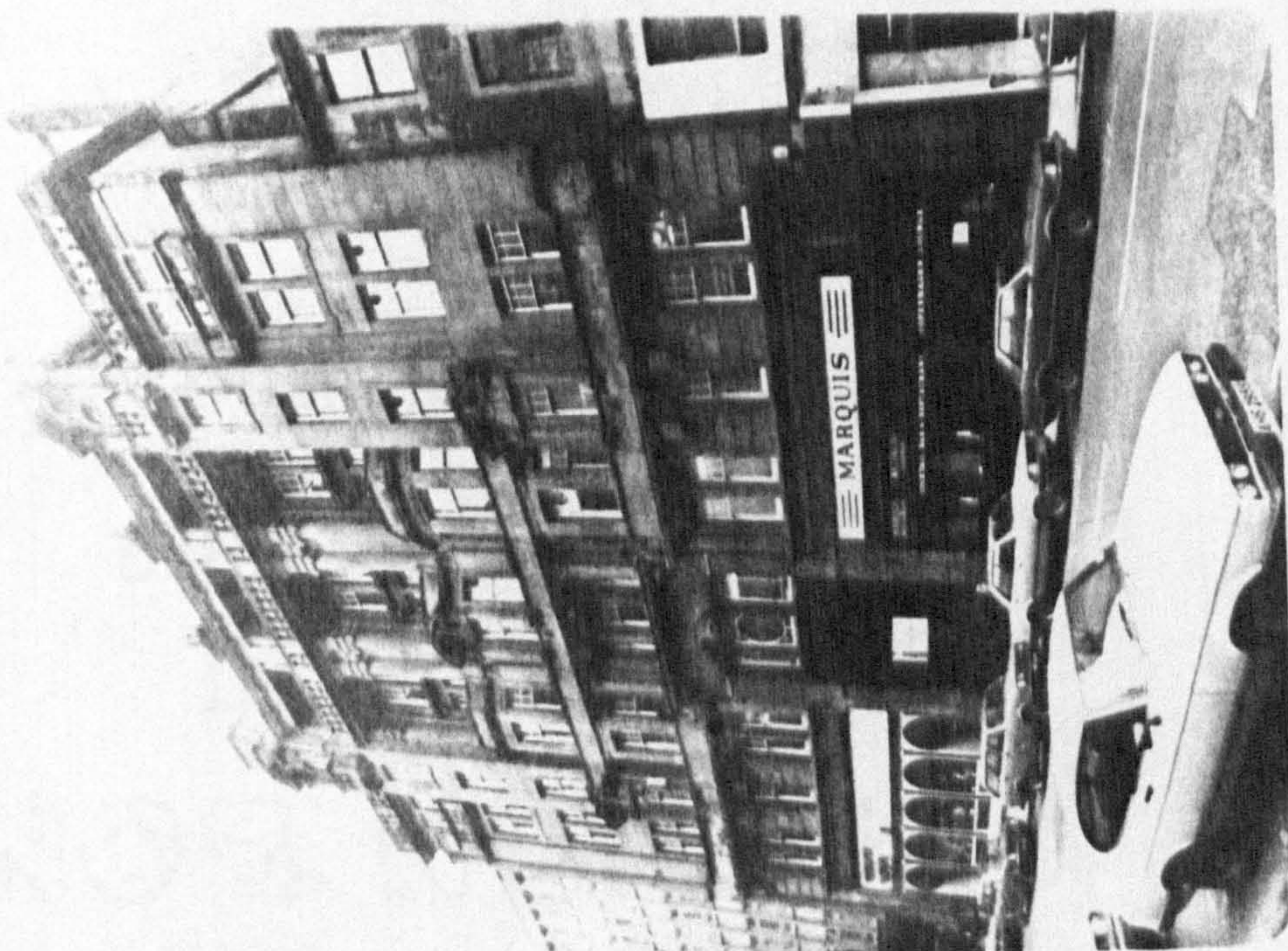
6-24





6-25
 EDINBURGH LIFE ASSURANCE, Glasgow, 1904
 ATLANTIC CHAMBERS, Glasgow, 1899
 6-26



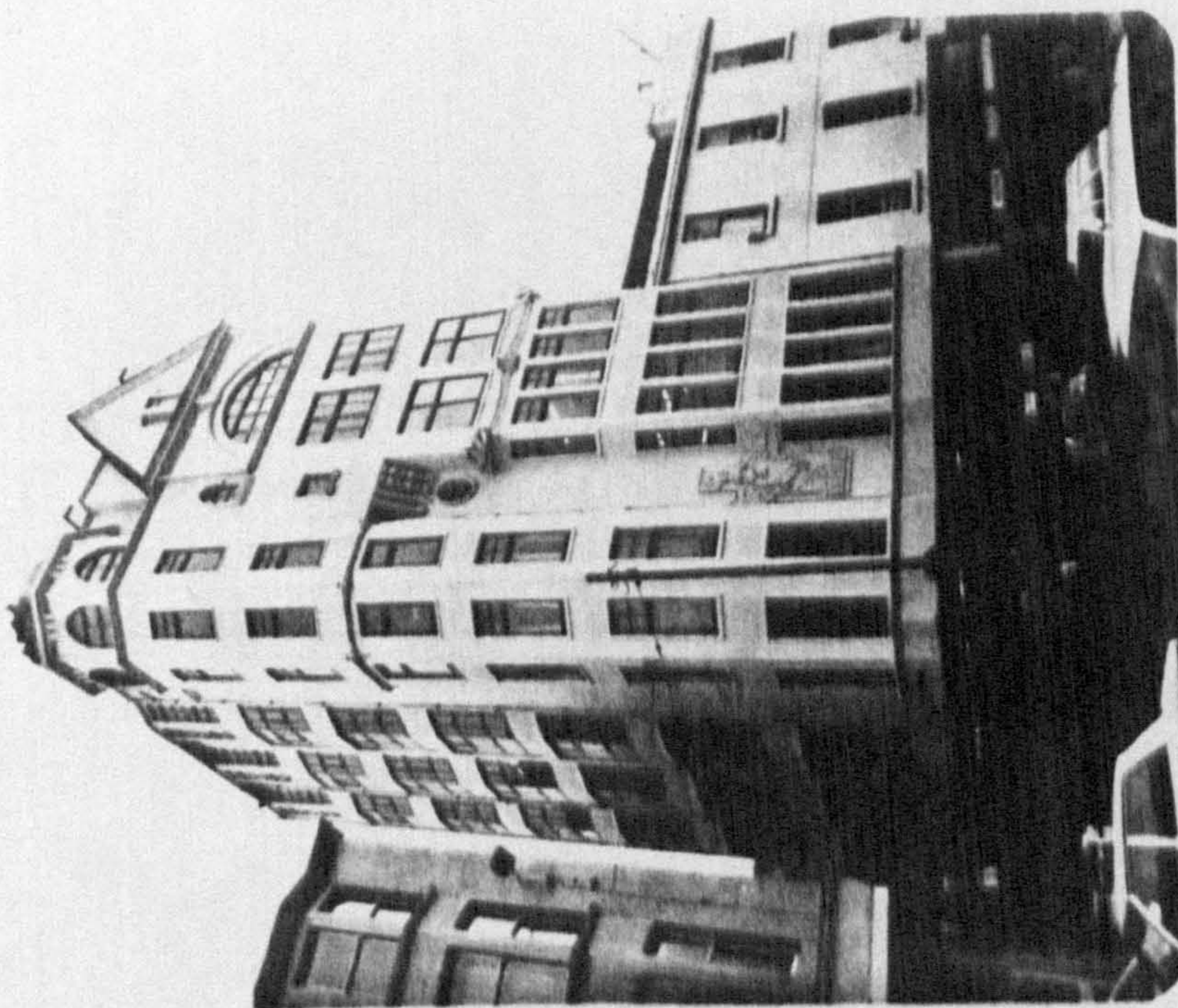


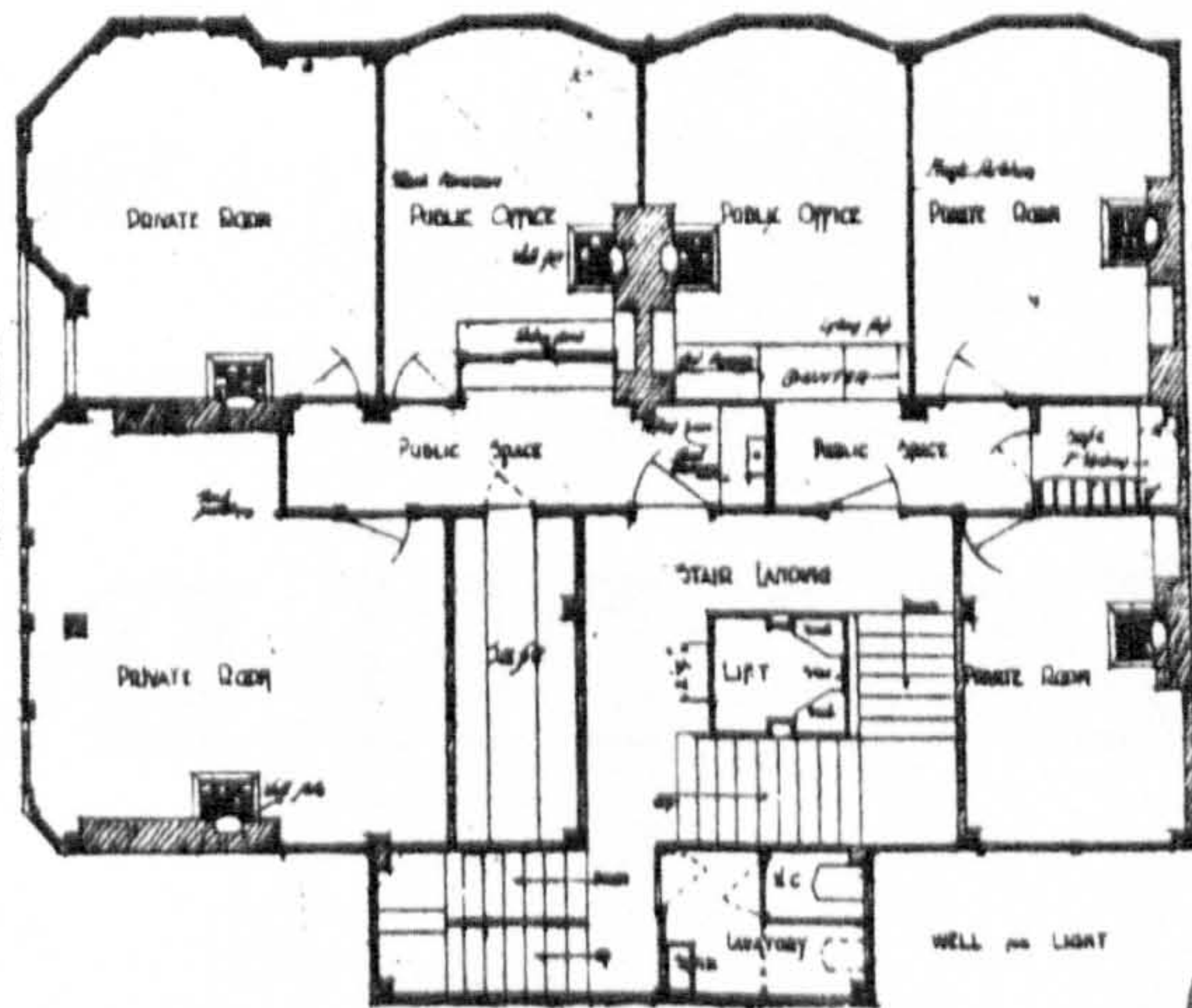
6-27

WATERLOO CHAMBERS, Glasgow, 1899

LYON CHAMBERS, Glasgow, 1907

6-28



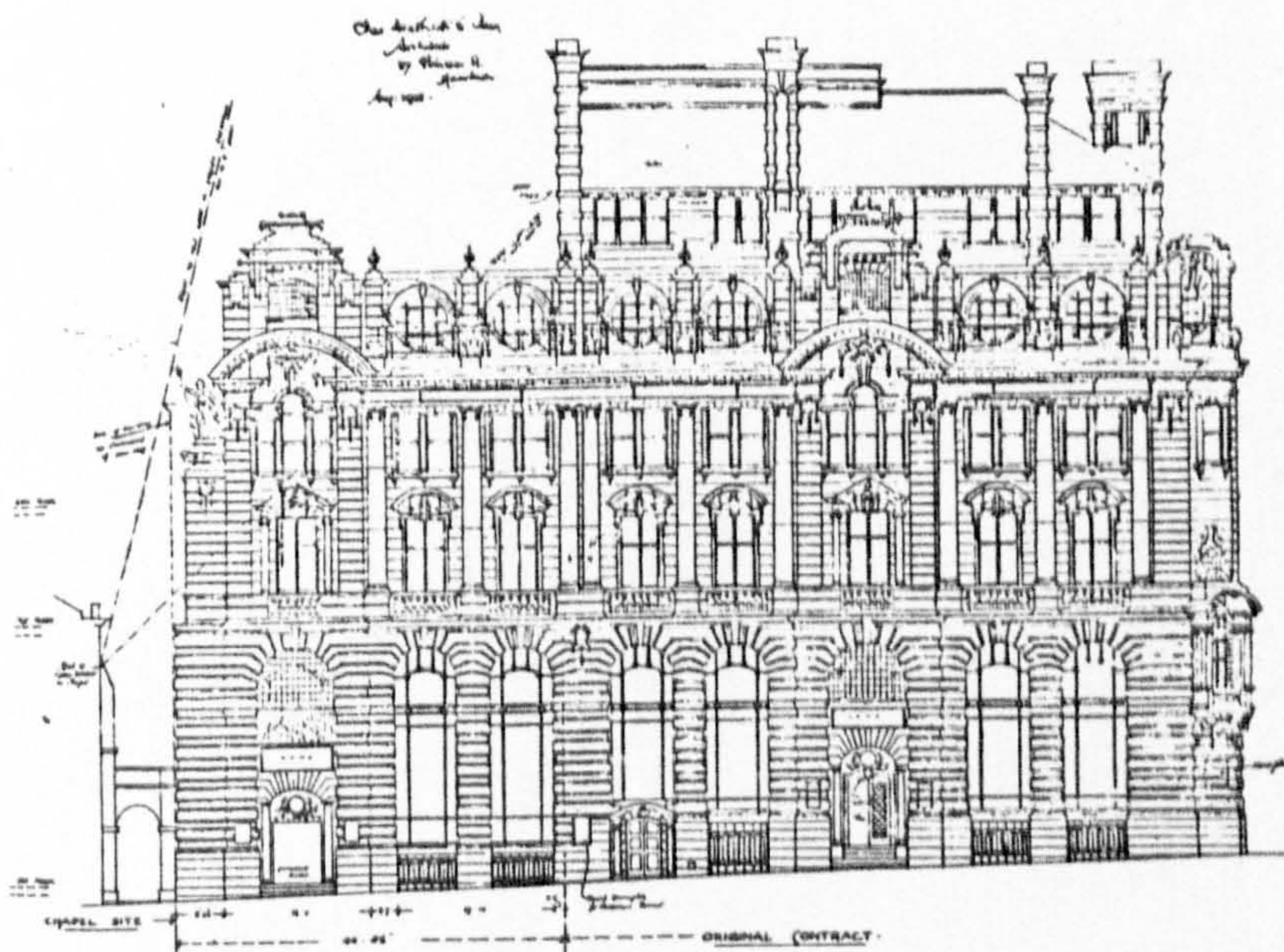


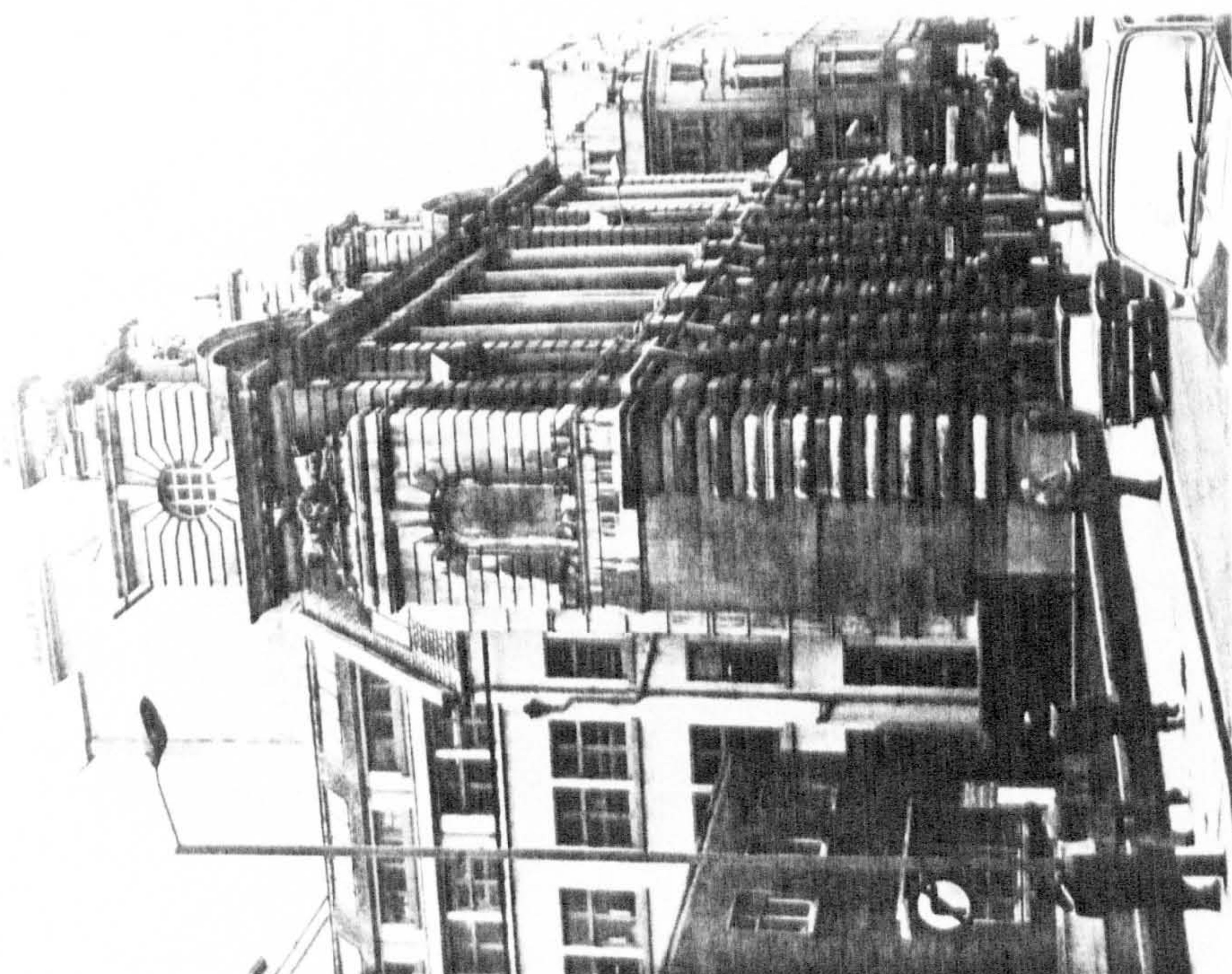
6-29

LYON CHAMBERS, Glasgow, 1907
LLOYDS BANK, Manchester, 1915

6-30

LLOYDS BANK
MANCHESTER
ELEVATION TO CROSS ST INCLUDING EXTENSION:



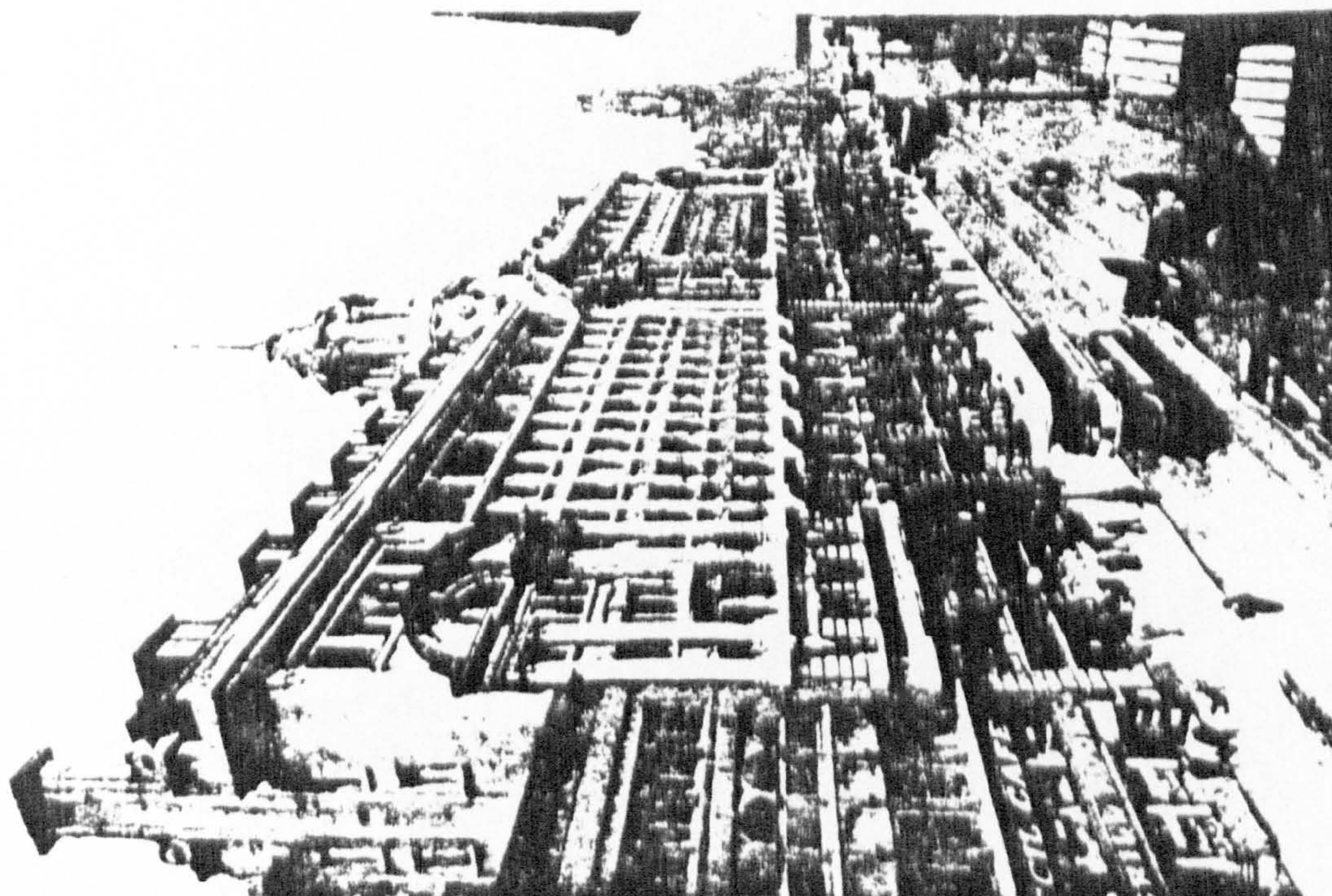


6-31

LLOYDS BANK, Manchester, 1915

CALICO PRINTERS' BUILDING, Manchester, 191-

6-32

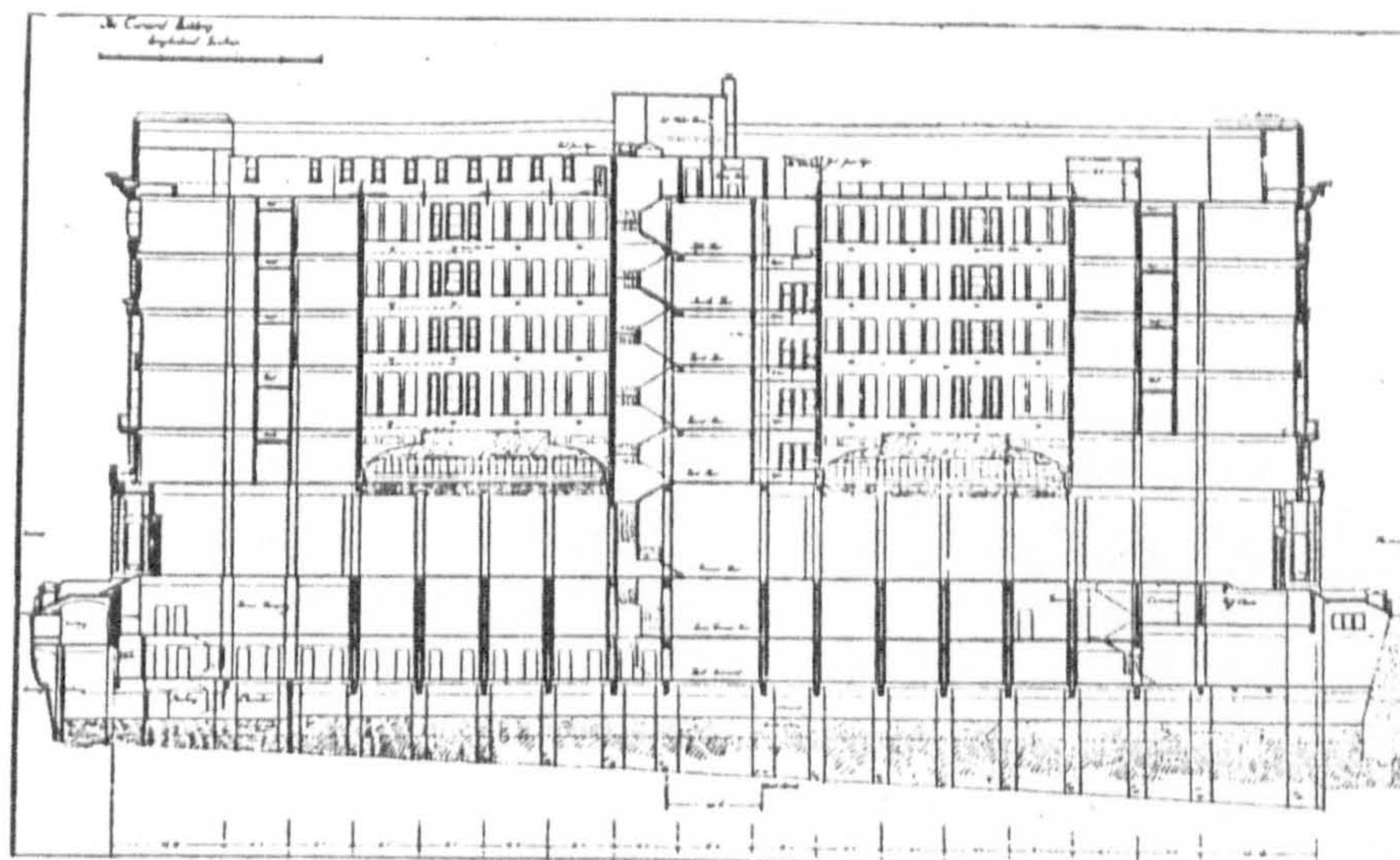


The Calico Printers' Building, Oxford Street.



6-33
 ROYAL LIVER FRIENDLY SOCIETY, 1910
 TOWER BUILDINGS, Liverpool, 1910
 6-34





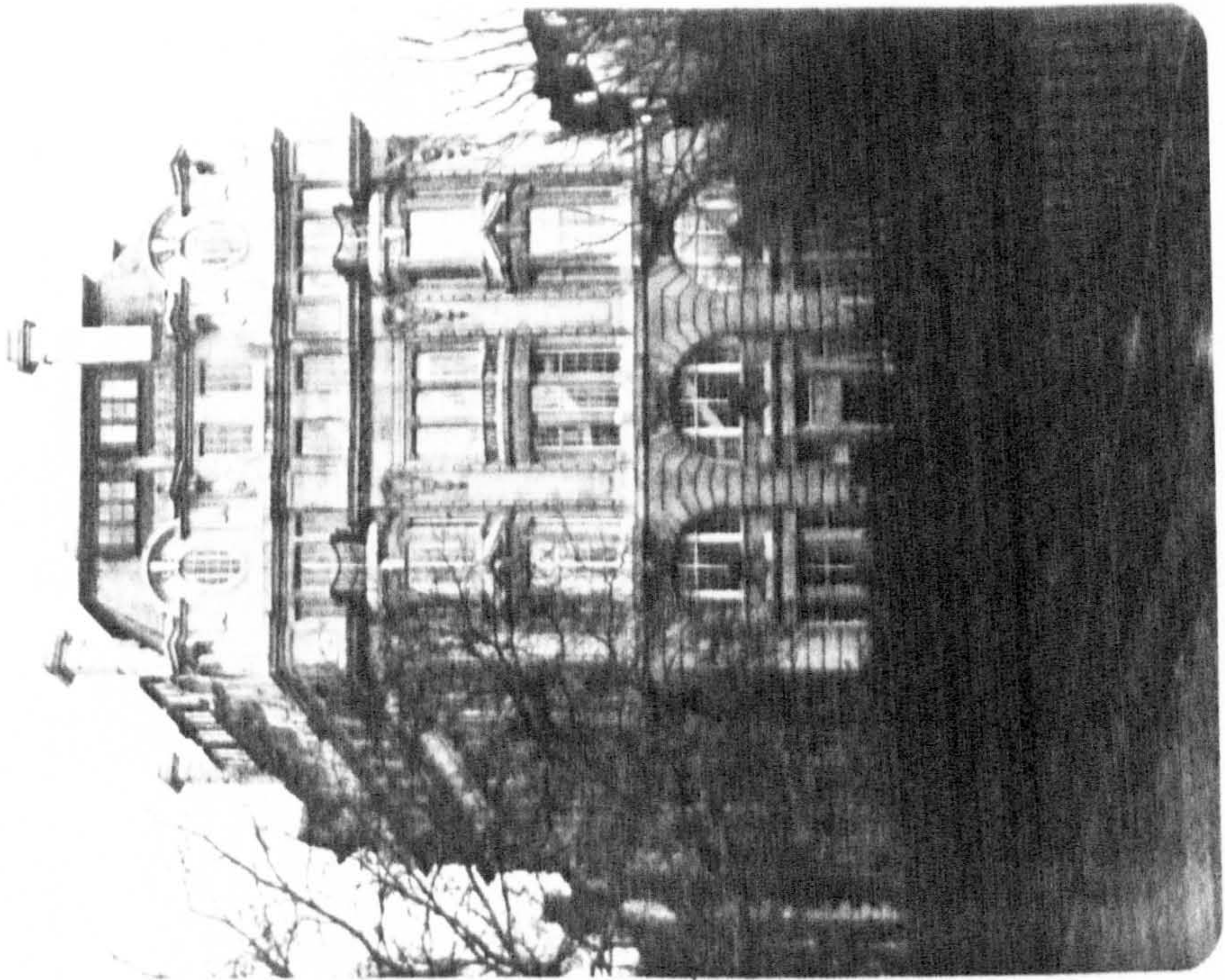
LONGITUDINAL SECTION OF THE CUNARD BUILDING, LIVERPOOL, SHOWING METHOD OF LIGHTING.
 Messrs. WILKINS and THORNTON, F.R.I.B.A., Architects.
 (Messrs. HAWK and DARR, Consulting Architects.)

6-35

CUNARD BUILDING, Liverpool, 1914
 WATERLOO PLACE, Westminster, 1911-1922

6-36





6-37

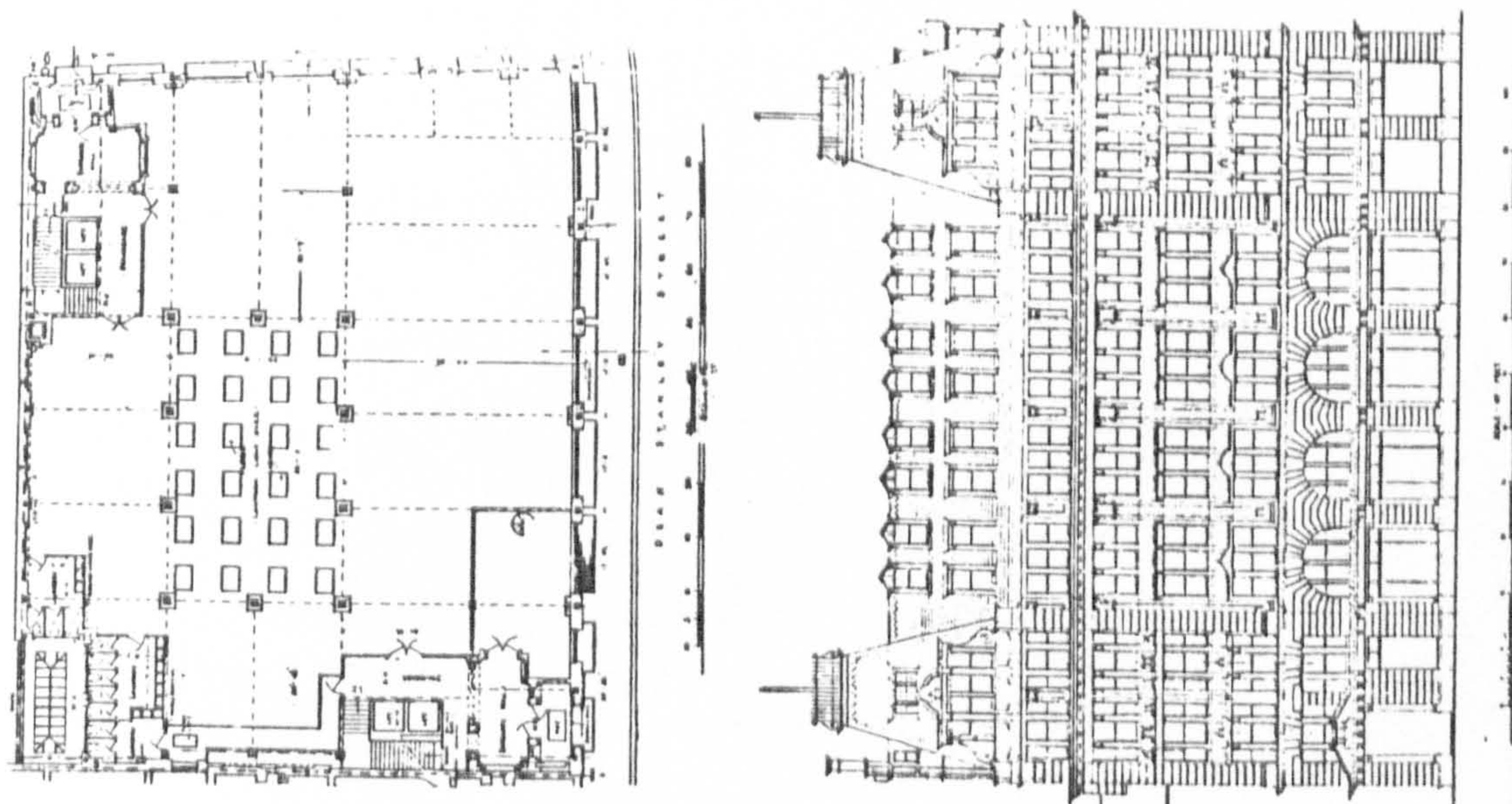
ANGLO AMERICAN OIL CO., Westminster, 1910
NATIONAL TELEPHONE CO., City, 1900

6-38

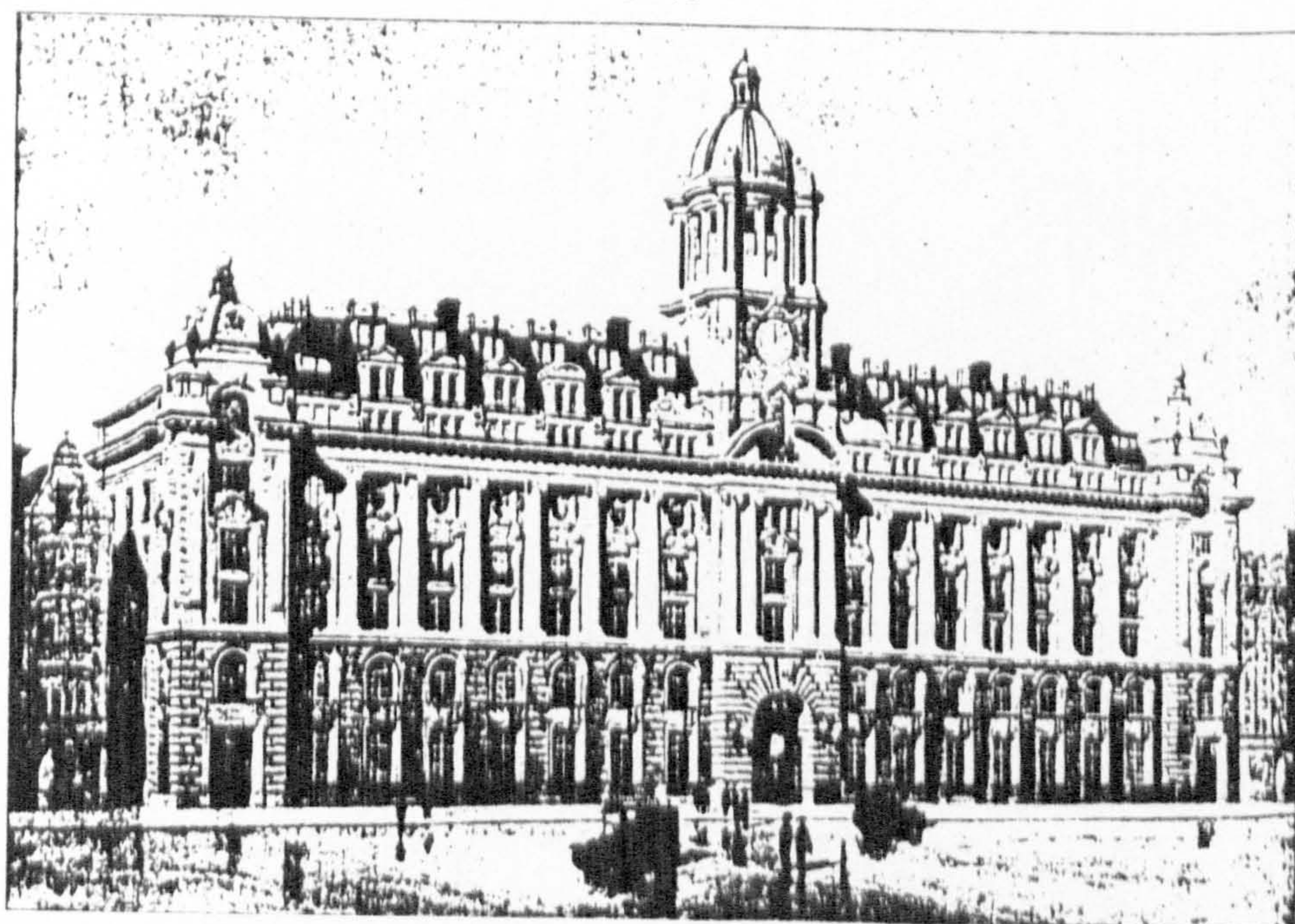


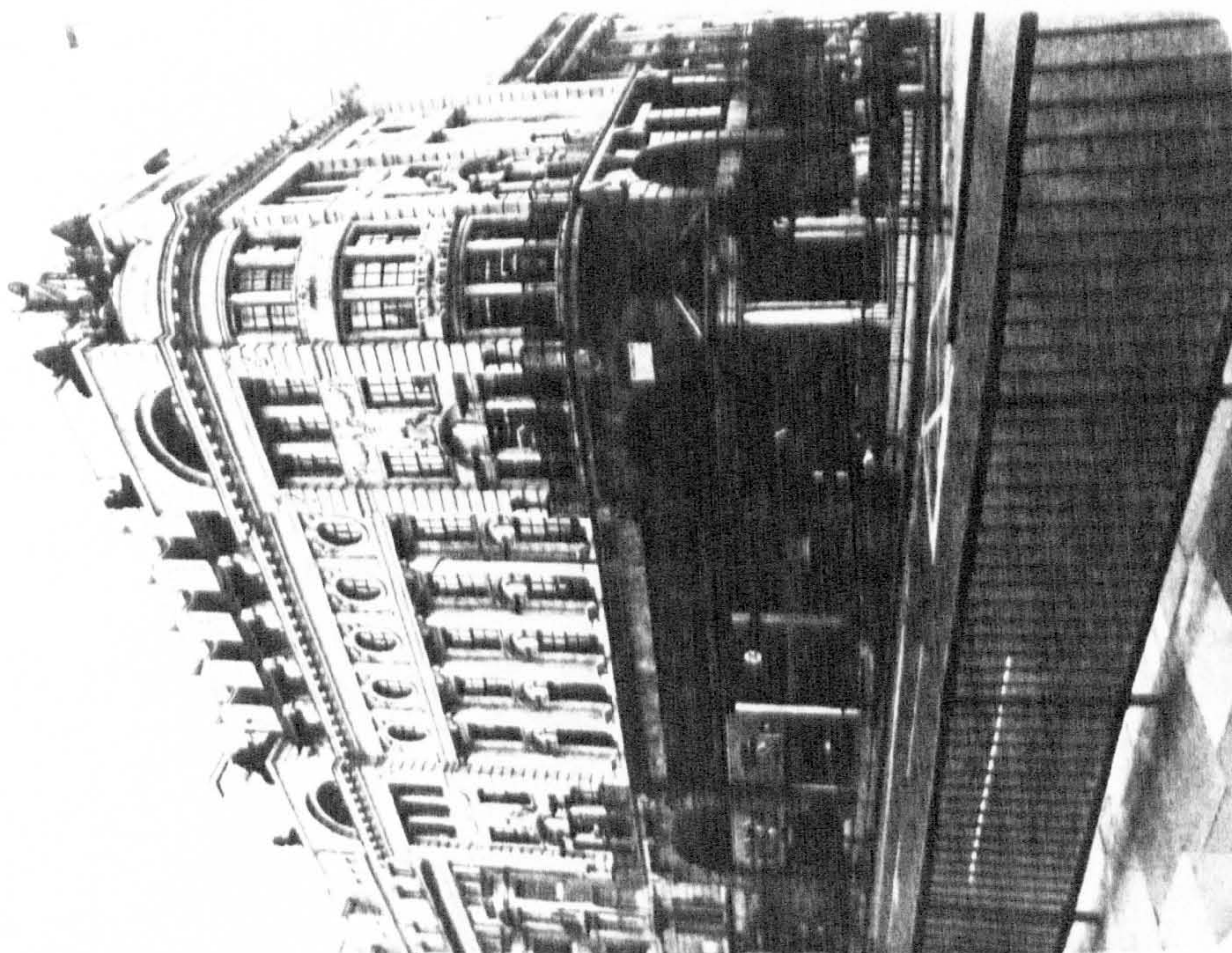
NATIONAL TELEPHONE HEAD OFFICES, VICTORIA BRANCHMENT - By A. H. DUNLOP, F.R.I.B.A., Architect

72

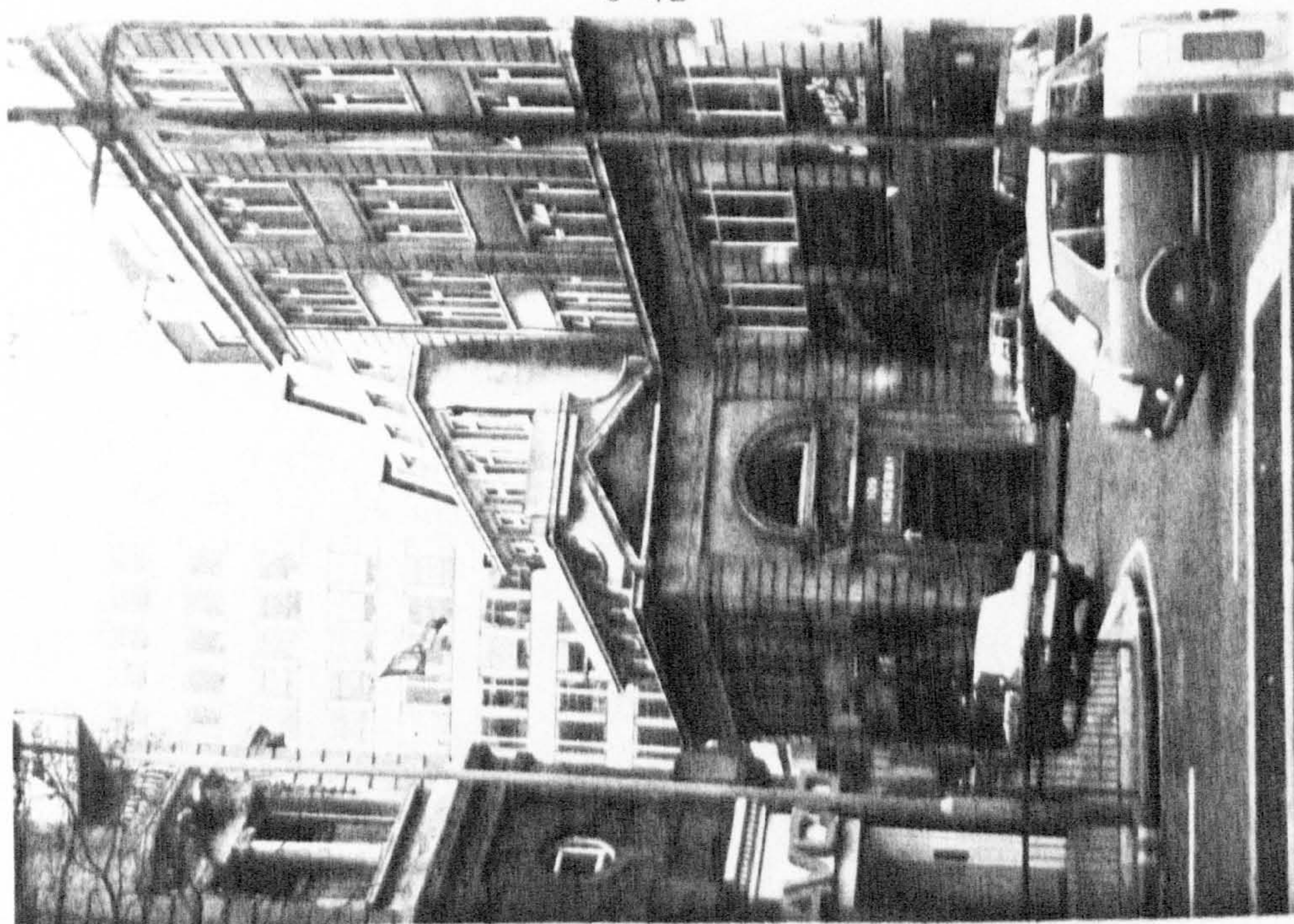


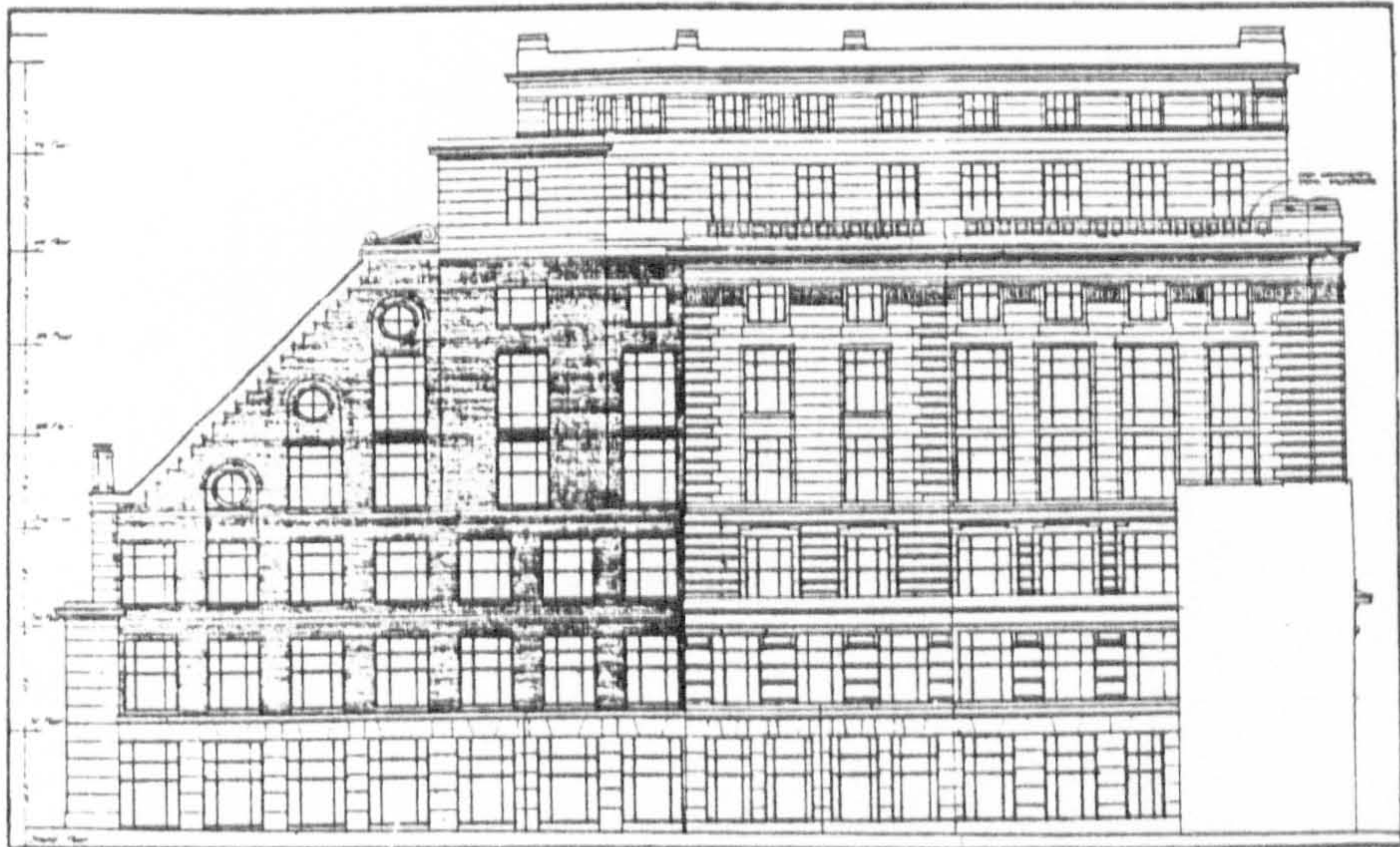
6-39
 WESTMINSTER HOUSE, Westminster, 1914
 PEARL ASSURANCE CO., Westminster, 1913
 6-40





6-41
 NORWICH UNION OFFICE, Westminster, 1910
 109 KINGSWAY, Westminster, 191-
 6-42

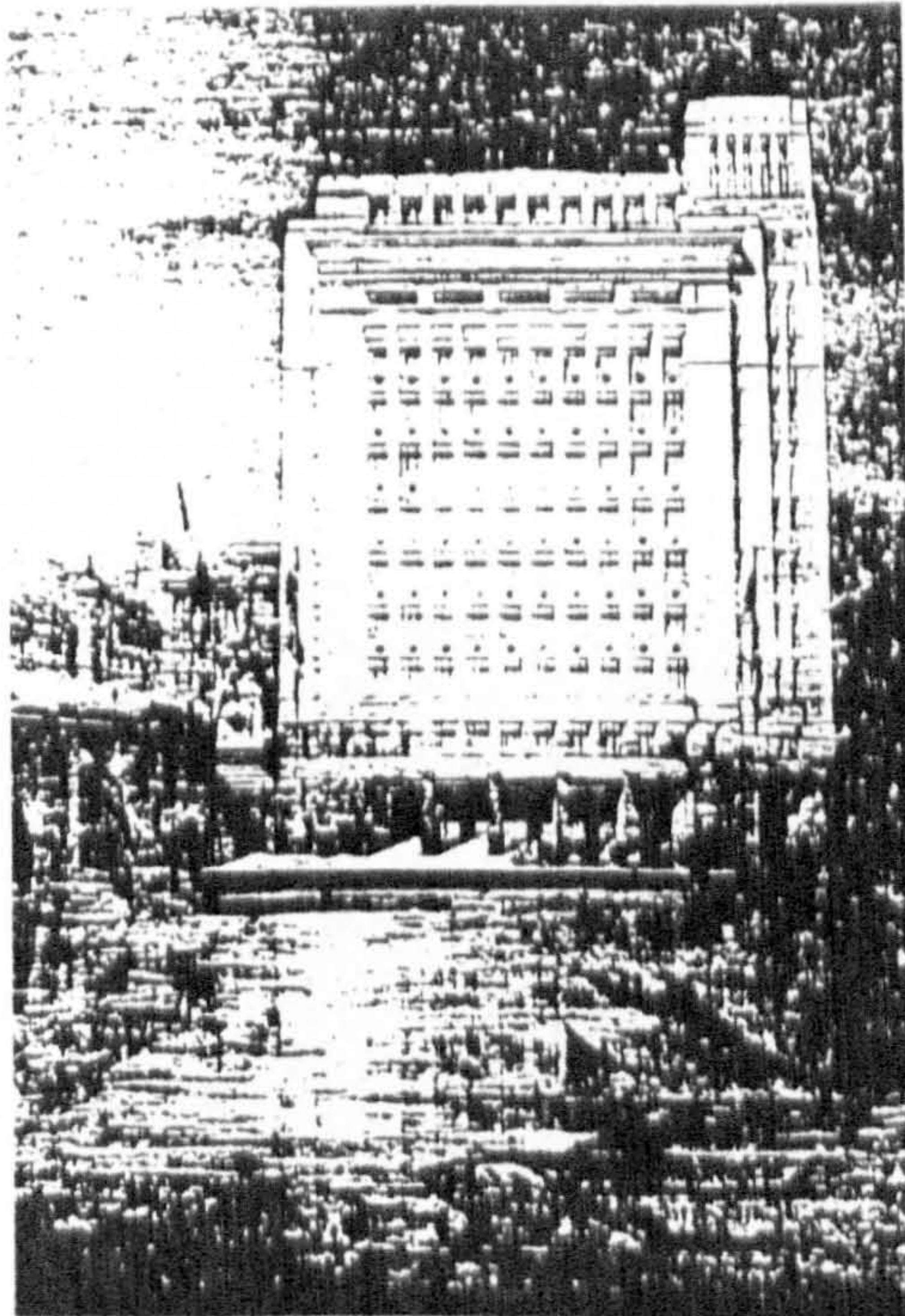




6-43
 AFRICA HOUSE, Westminster, 1922
 BLACKFRIARS HOUSE, City, 1917
 6-44



"BLACKFRIARS HOUSE," NOW IN COURSE OF ERECTION NEAR THE SITE OF BRIDEWELL PALACE, NEW BRIDGE STREET, E.C. FOR MESSRS. SPICER BROS. LTD.
 Mr. Francis W. Taouy, F.R.I.B.A., Architect.

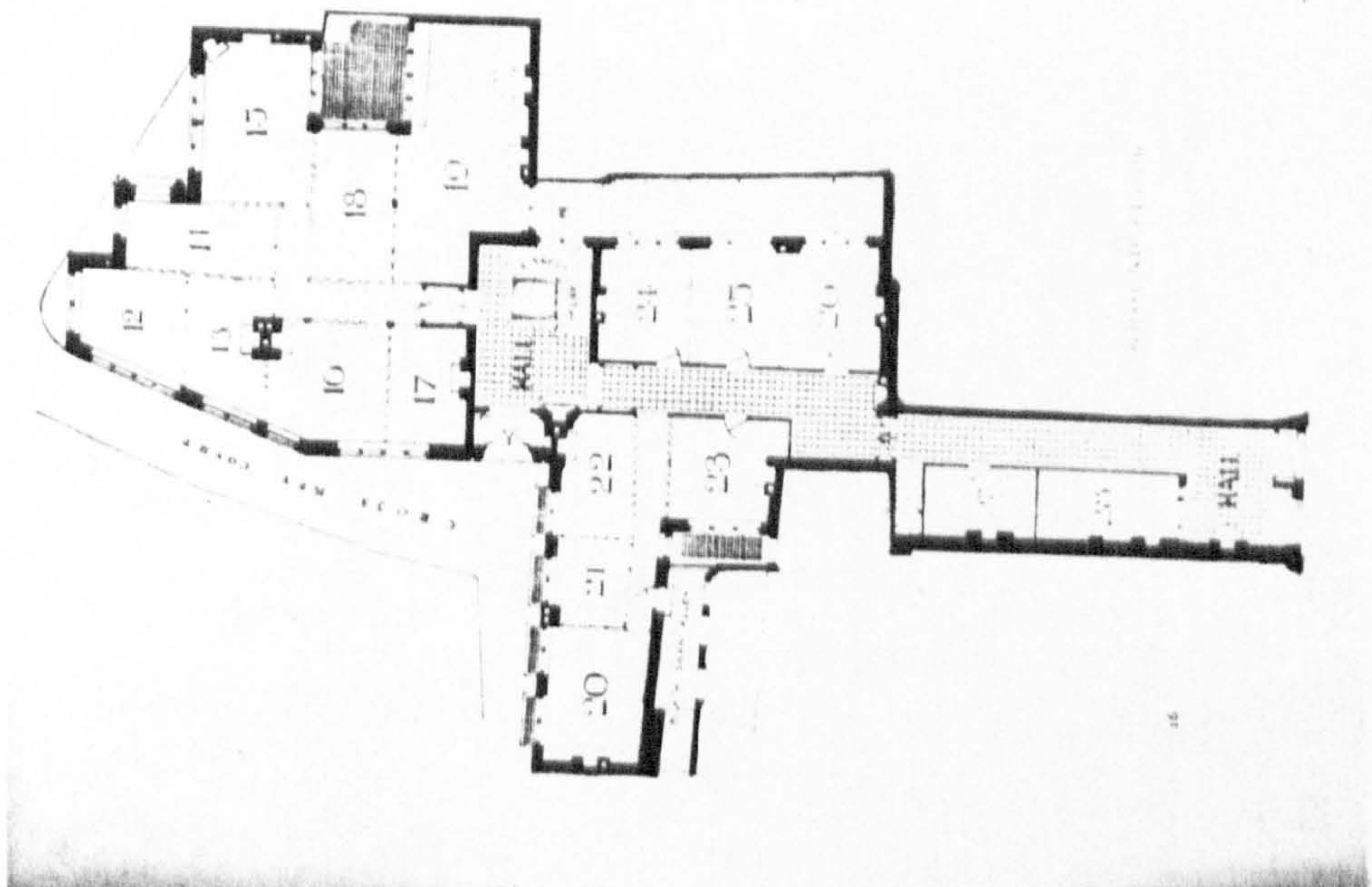


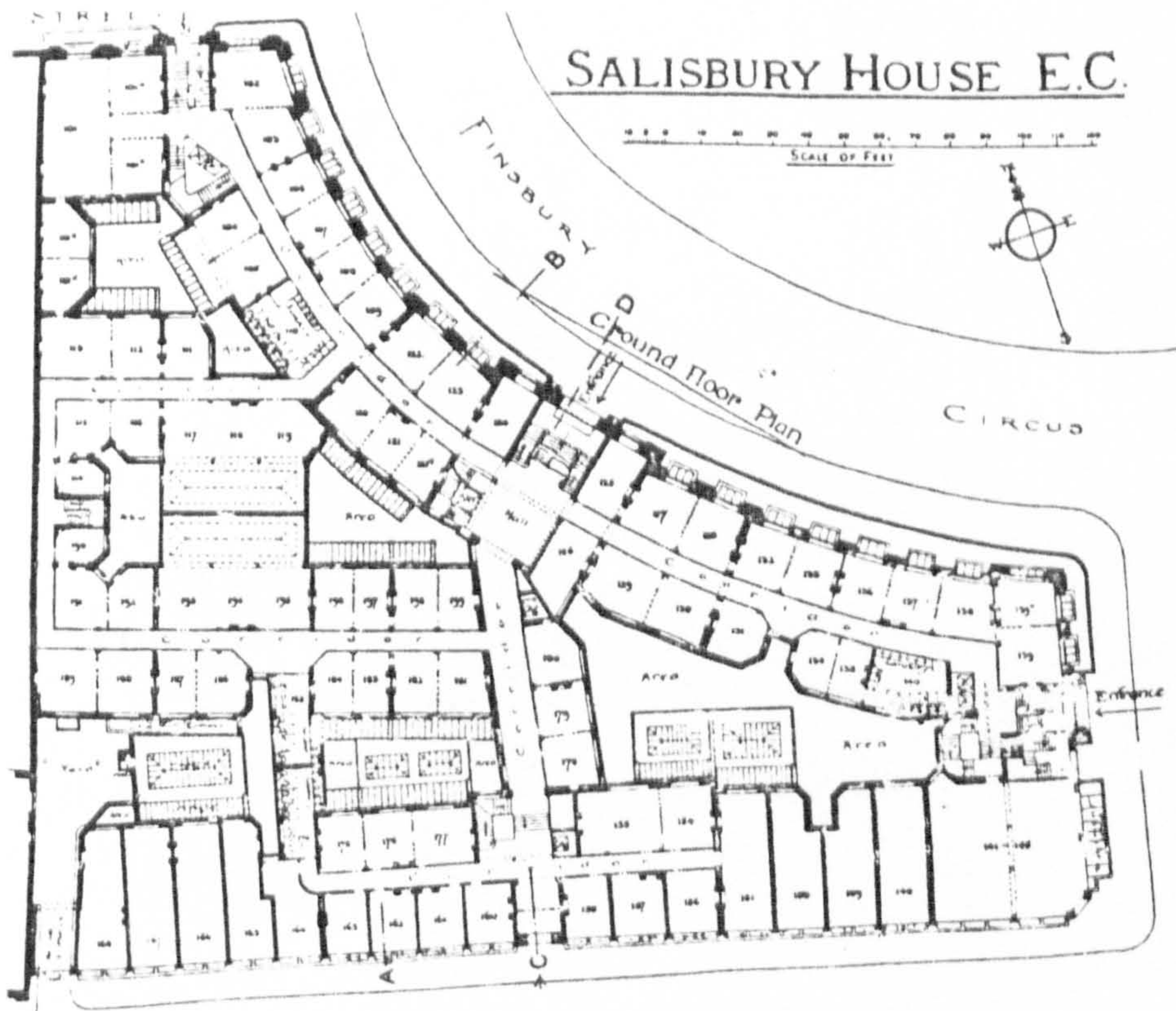
ADELAIDE HOUSE, LONDON BRIDGE: ELEVATION TO RIVER.
SIR JOHN BURNET AND PARTNERS, ARCHITECTS

6-45

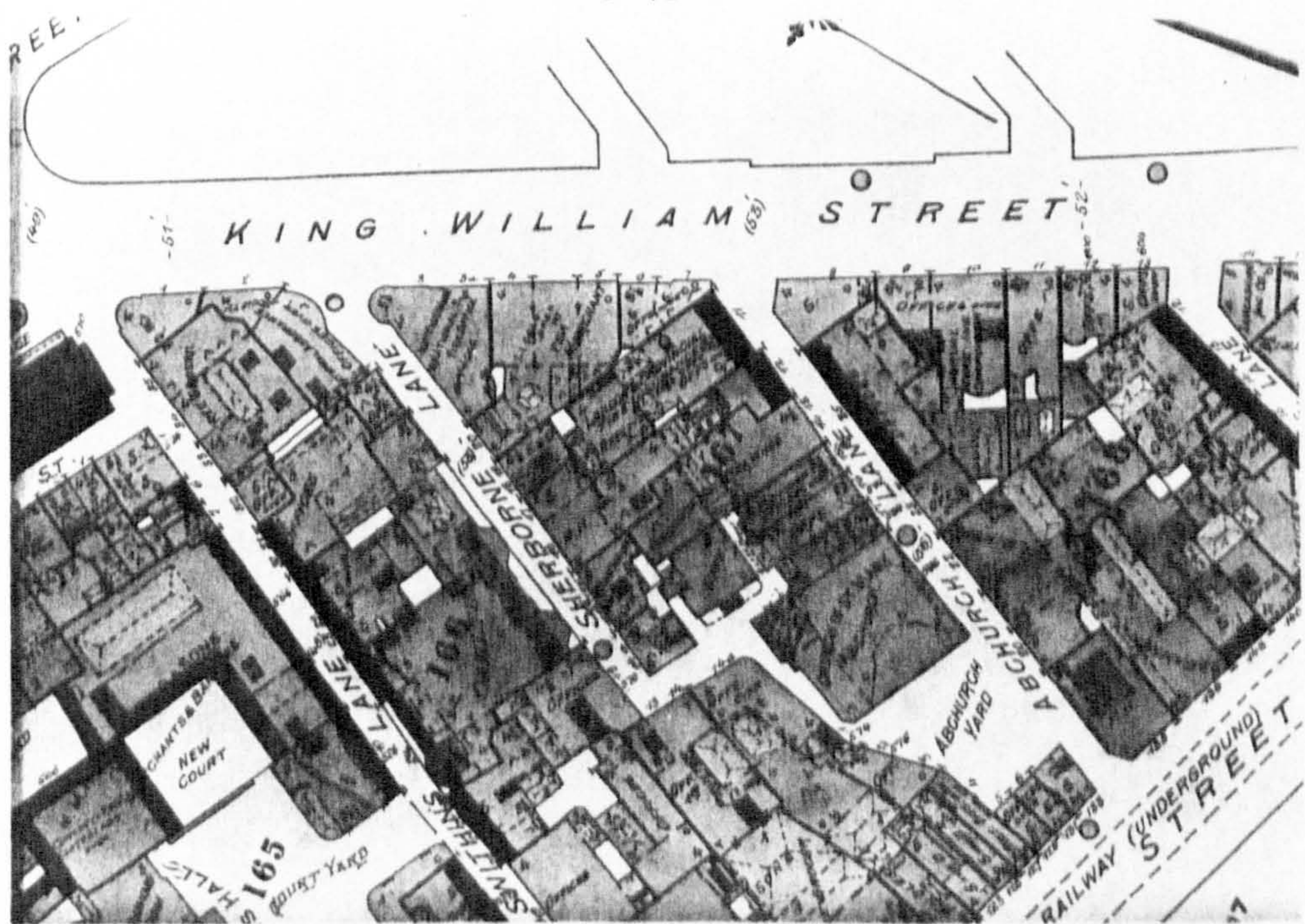
ADELAIDE HOUSE, City, 1922
CROSS KEYS HOUSE, City, 1908

6-46





6-47
SALISBURY HOUSE, City, 1901
PHOENIX ASSURANCE, City, 1913
6-48

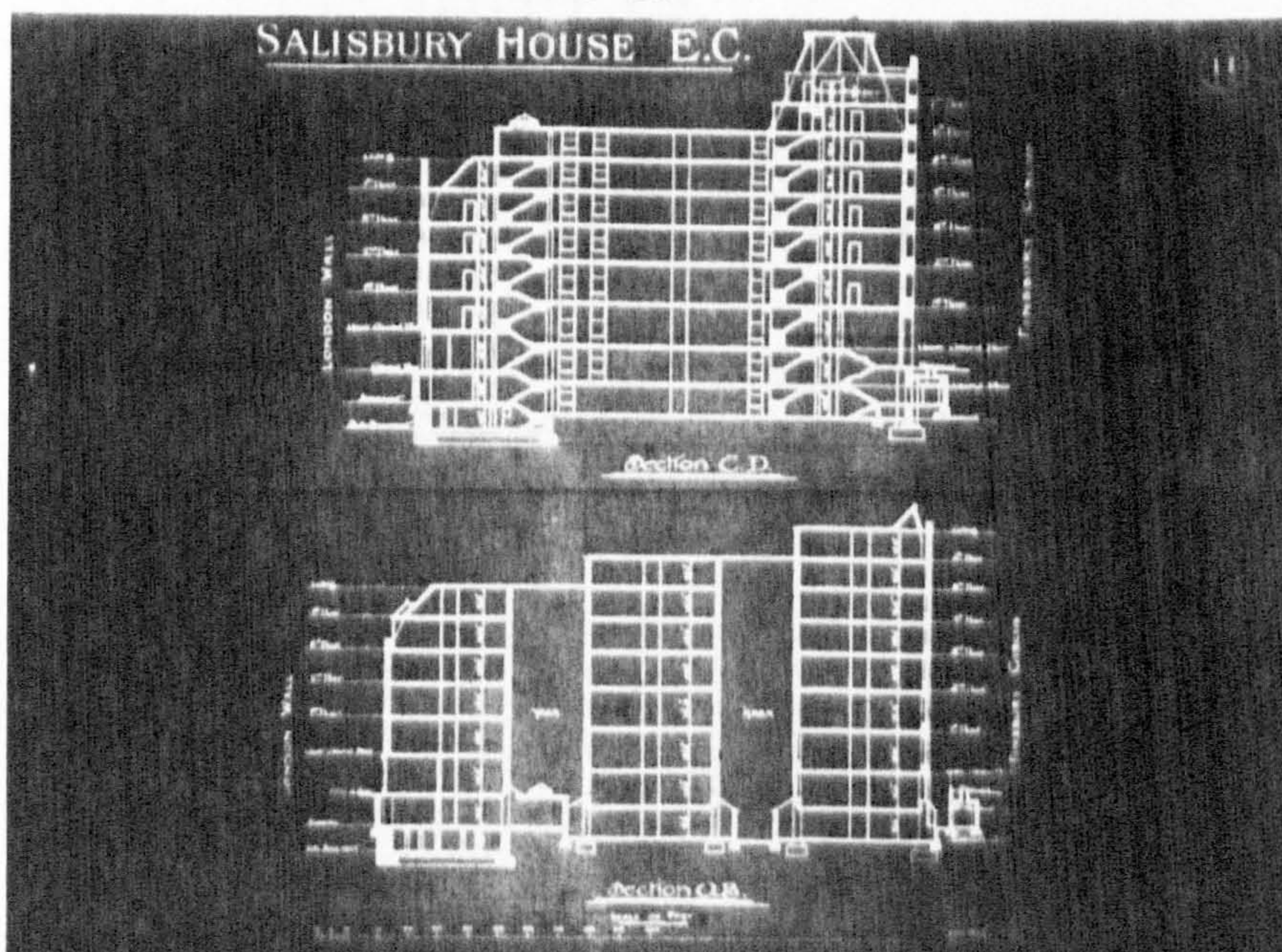


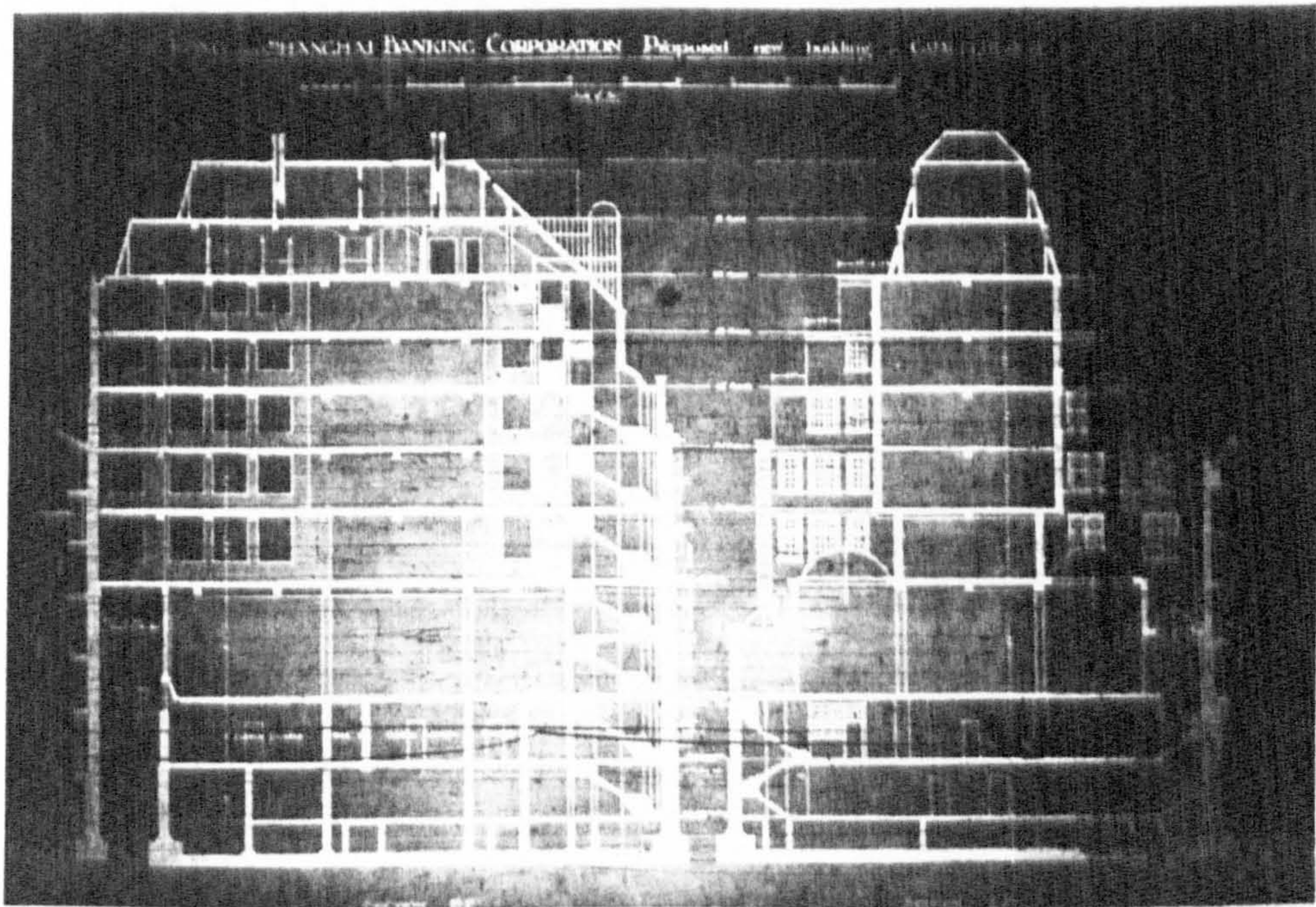


6-49

LONDON AND LANCASHIRE FIRE OFFICE, City, 1917
SALISBURY HOUSE, City, 1901

6-50

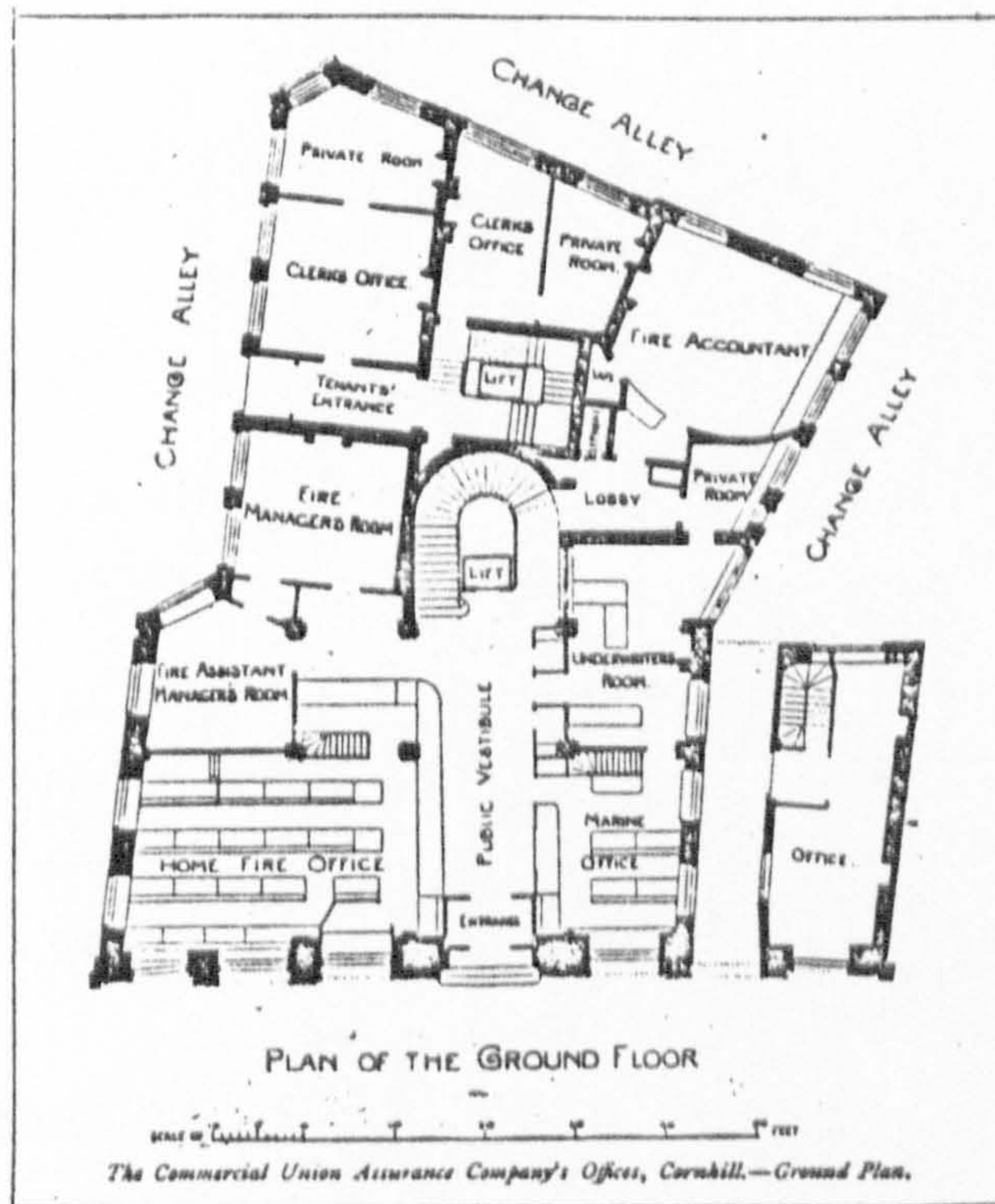


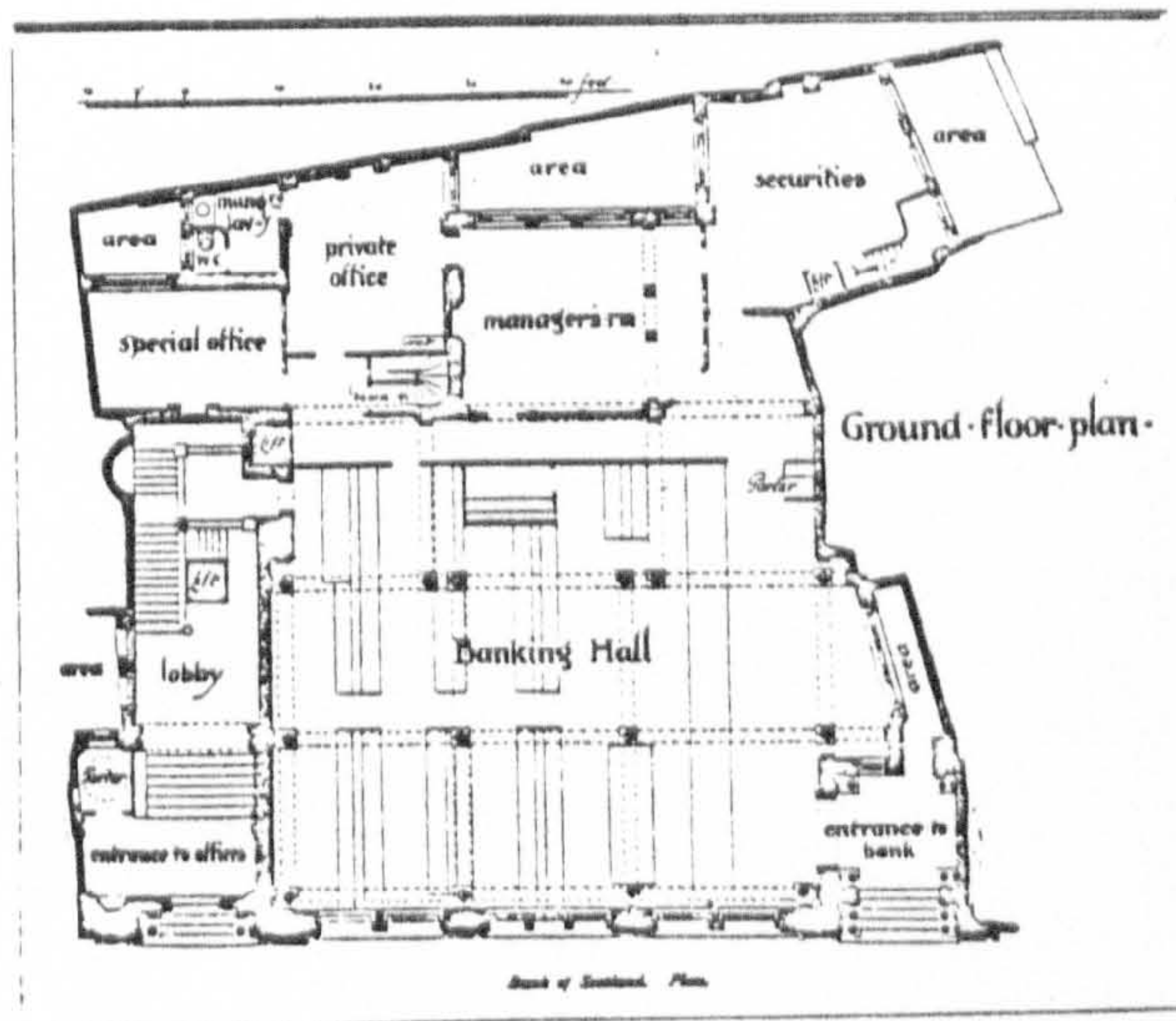


6-51

HONG KONG AND SHANGHAI BANK, City, 1914
COMMERCIAL UNION ASSURANCE, City, 1896

6-52

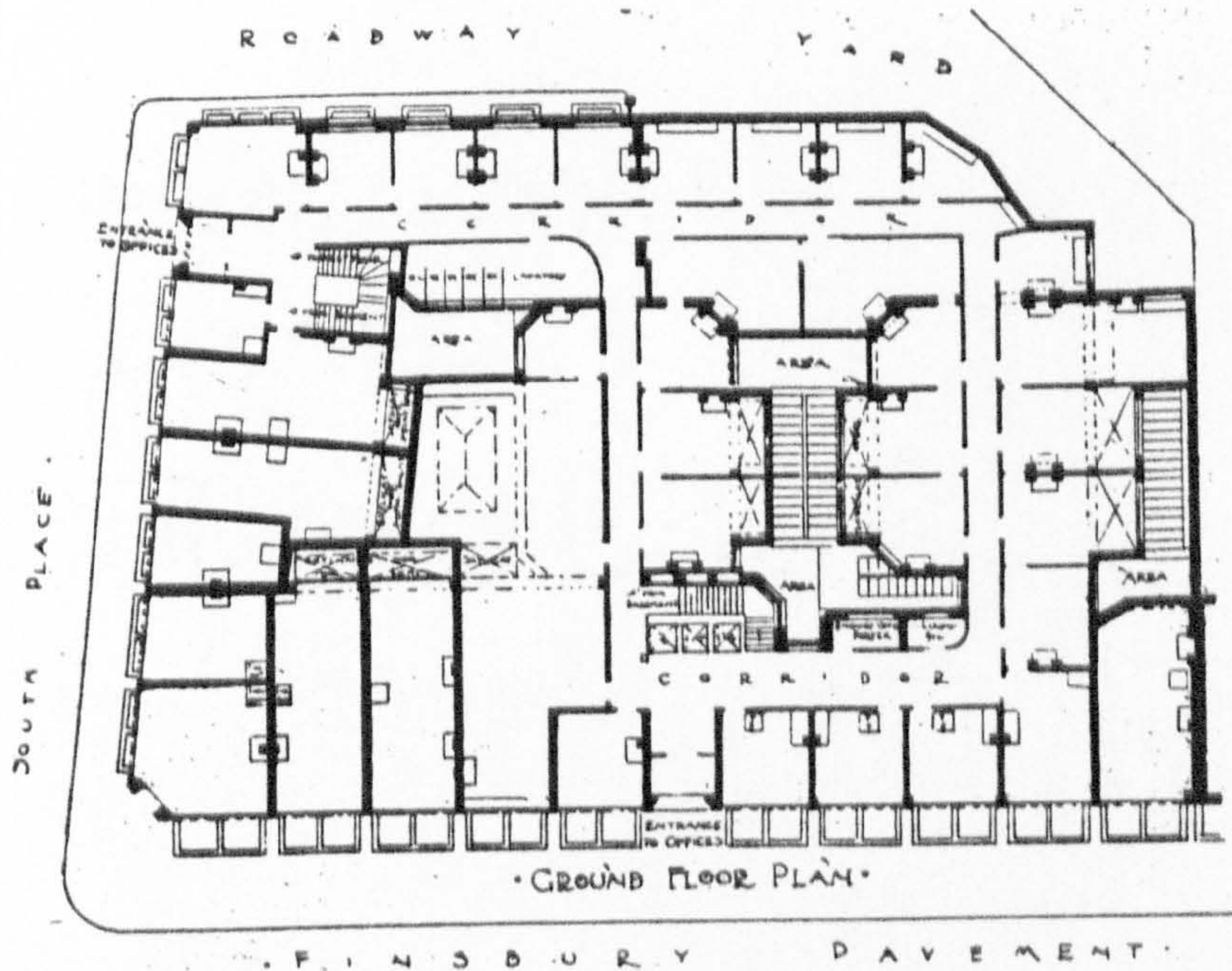


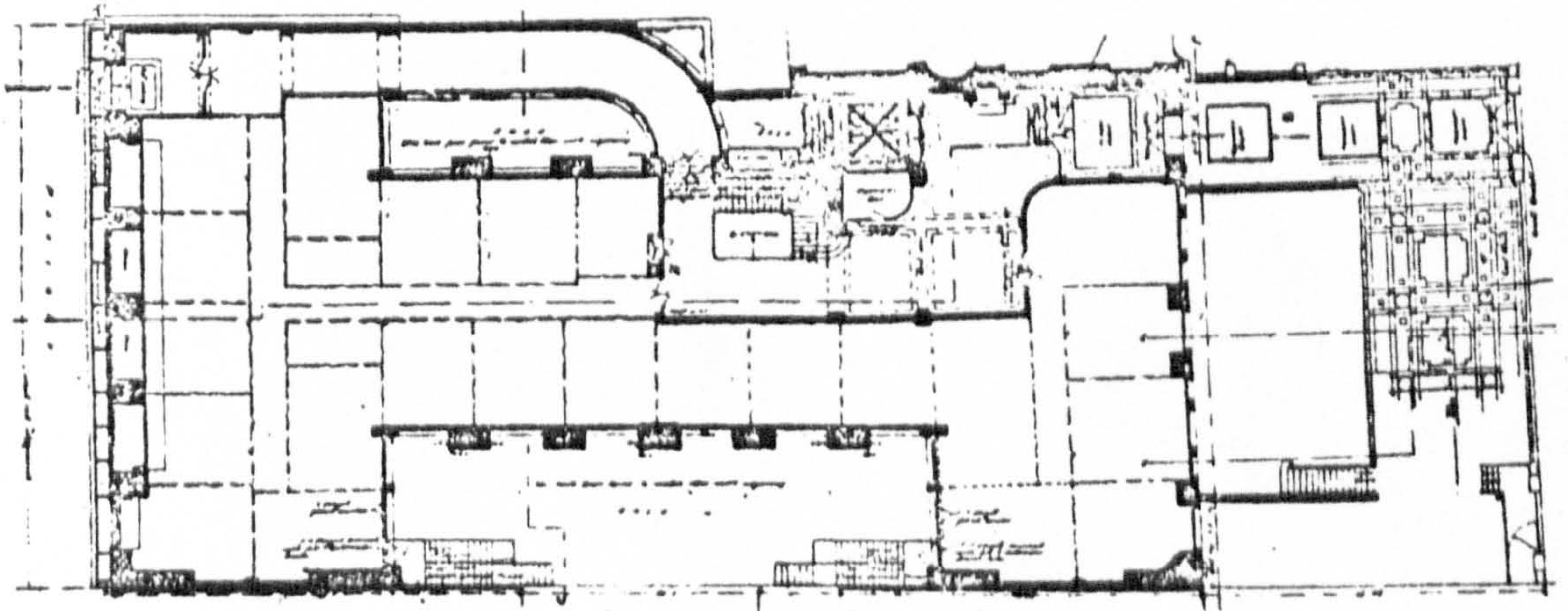


6-53

BANK OF SCOTLAND, City, 1896
FINSBURY PAVEMENT HOUSE, City, 1900

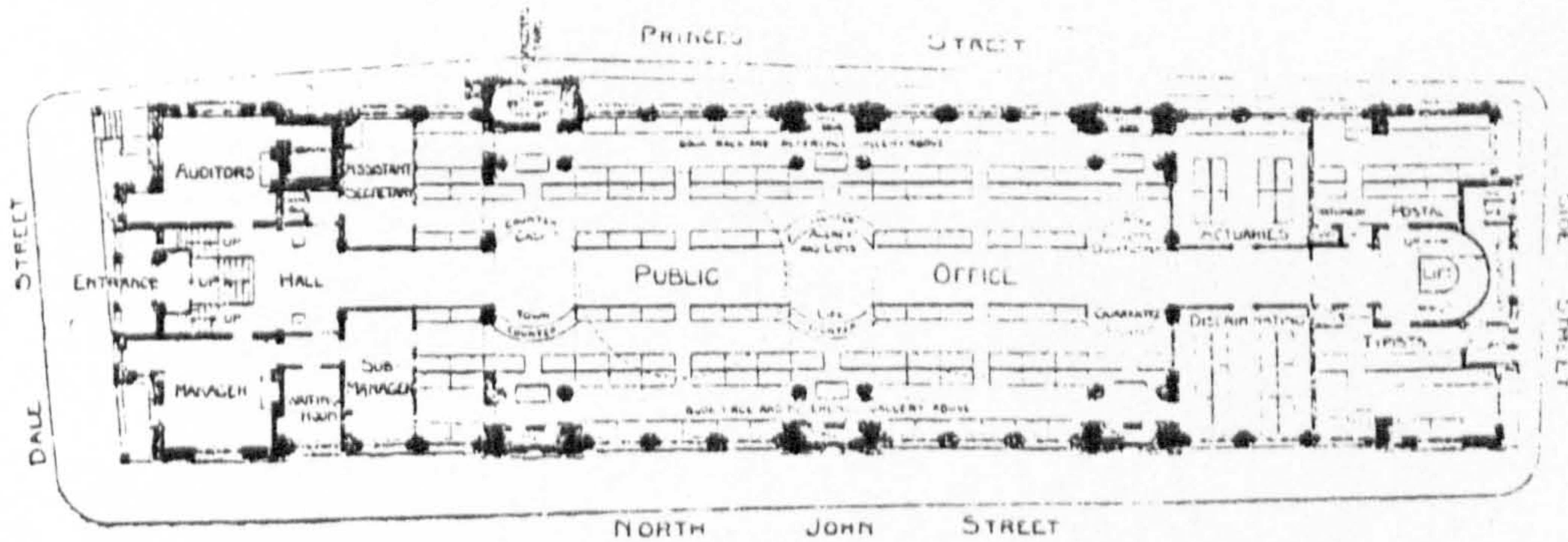
6-54

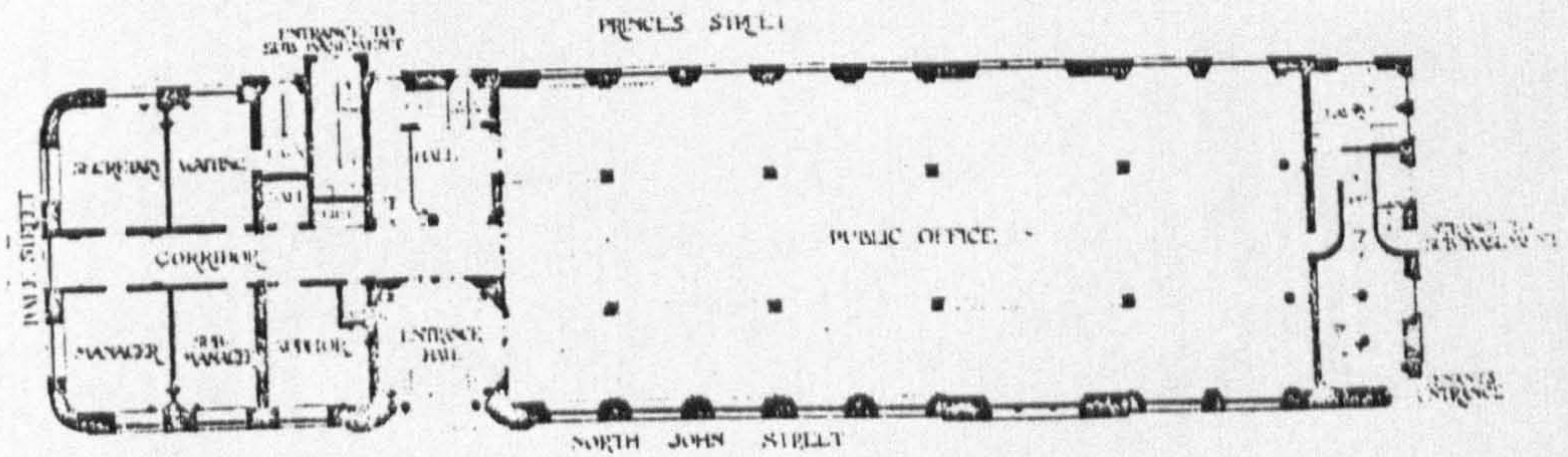




6-55

QUEENS HOUSE, Westminster, 1917
 ROYAL INSURANCE BUILDING DESIGN, Liverpool, 1896
 6-56

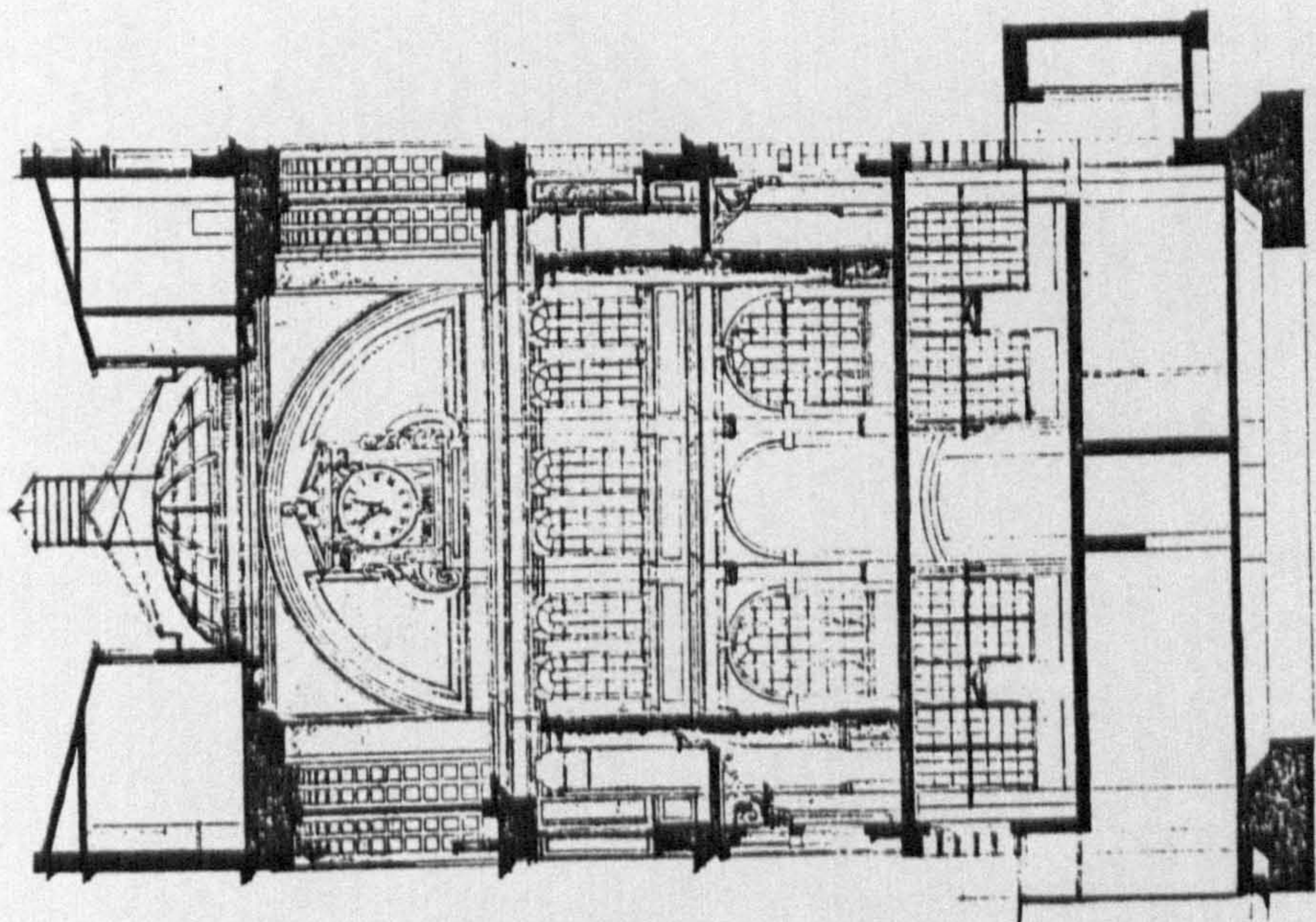


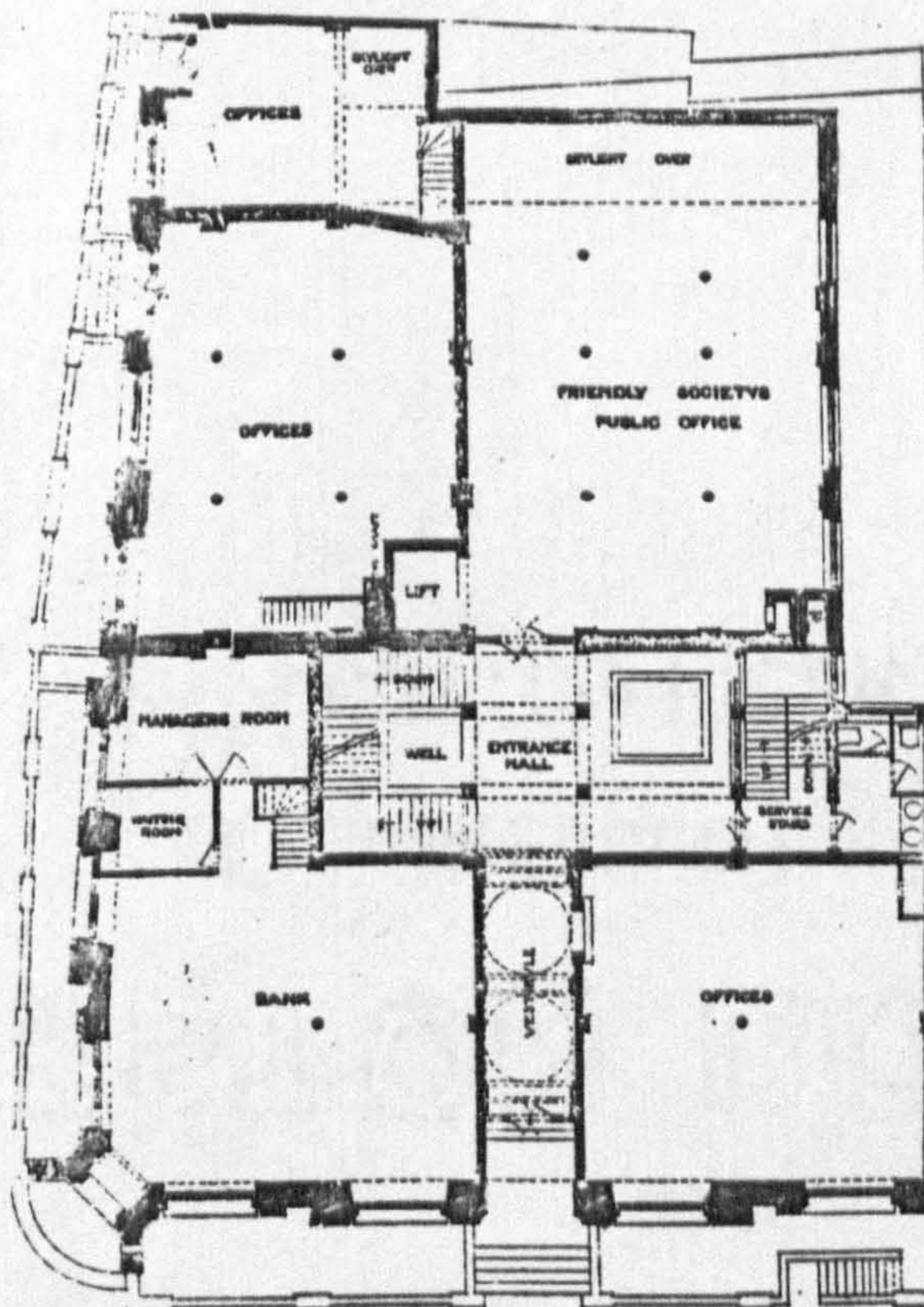


6-57

ROYAL INSURANCE BUILDING DESIGN, Liverpool, 1896
ROYAL INSURANCE BUILDING DESIGN, Liverpool, 1896

6-58

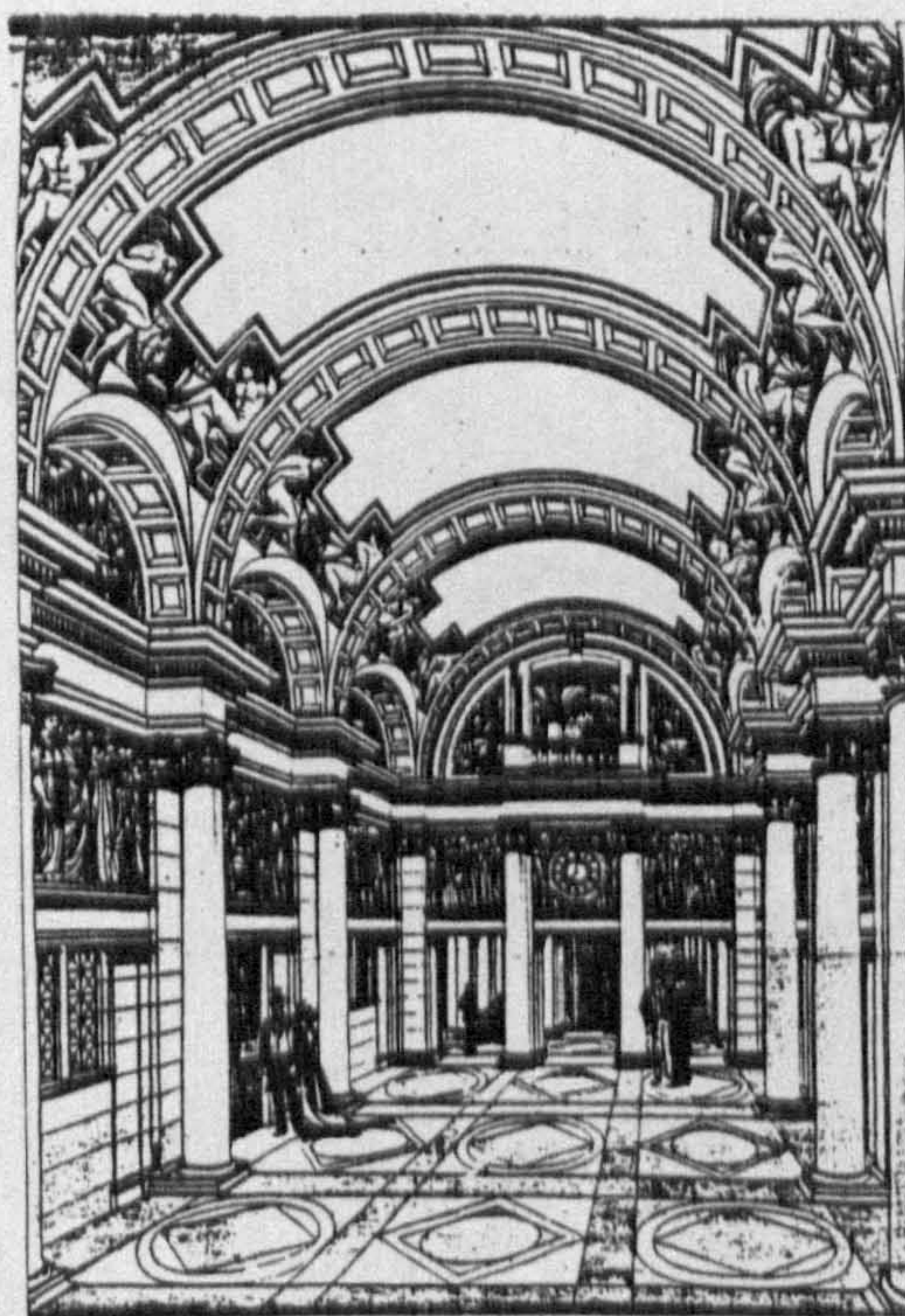




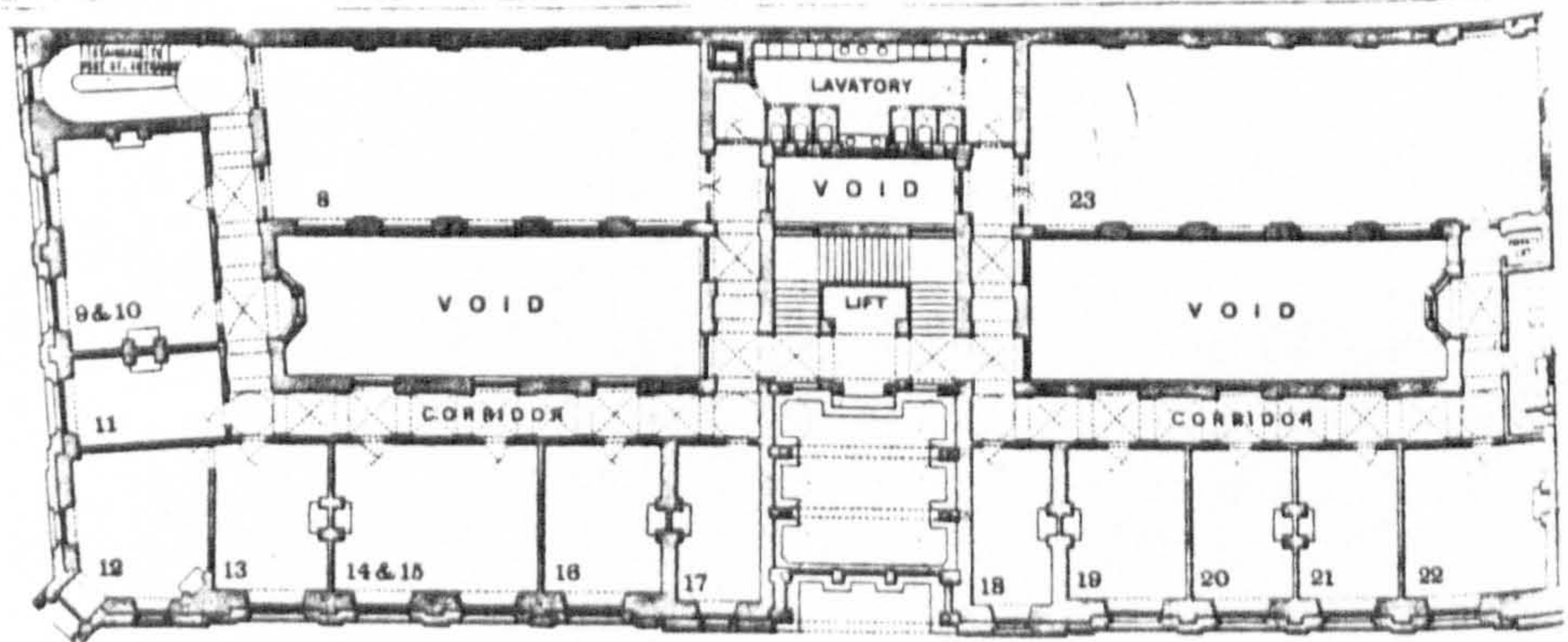
6-59

ROYAL LONDON FRIENDLY SOCIETY, City, 1903
ELECTRA HOUSE, City, 1900

6-60



ELECTRA HOUSE.

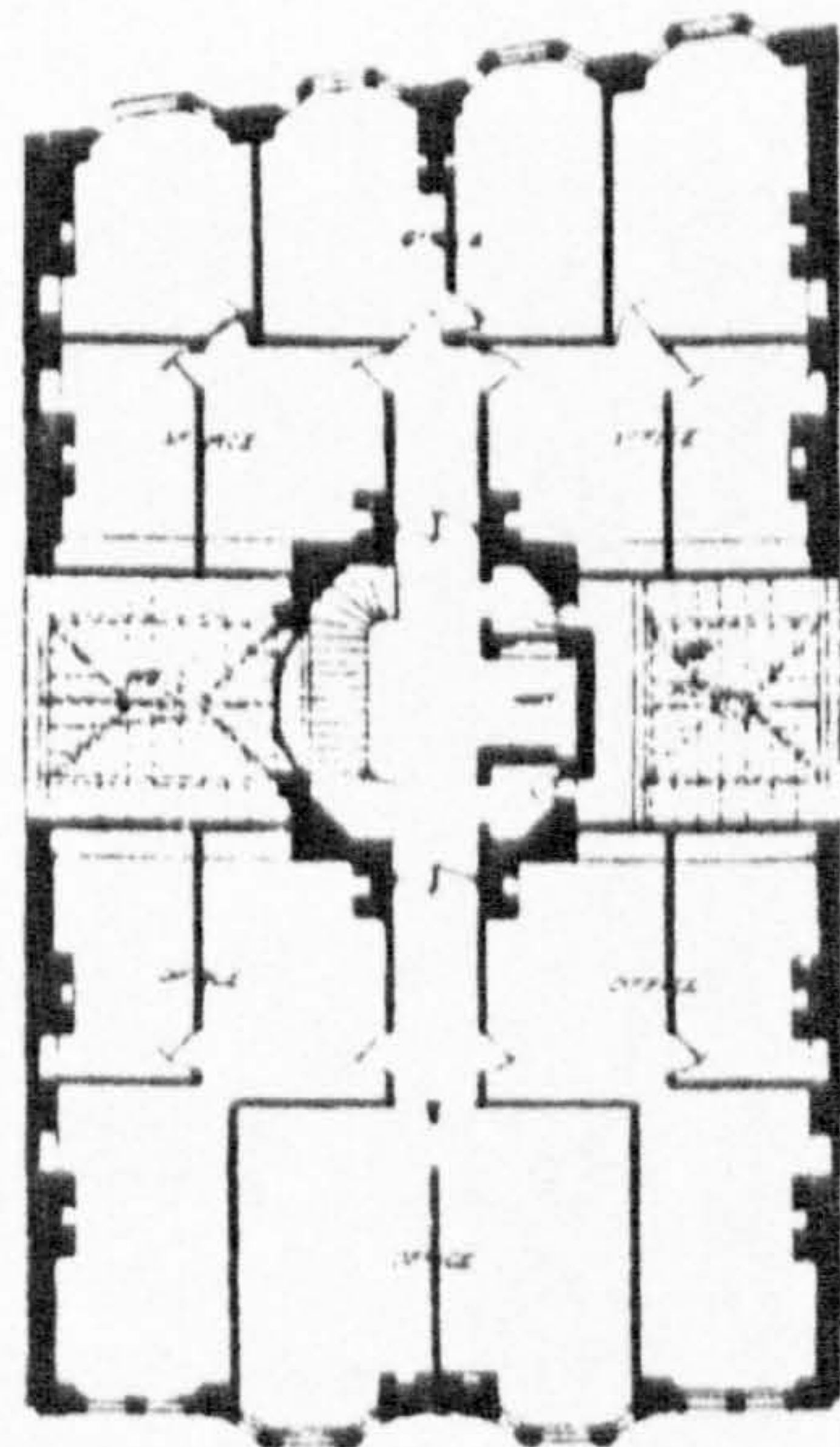
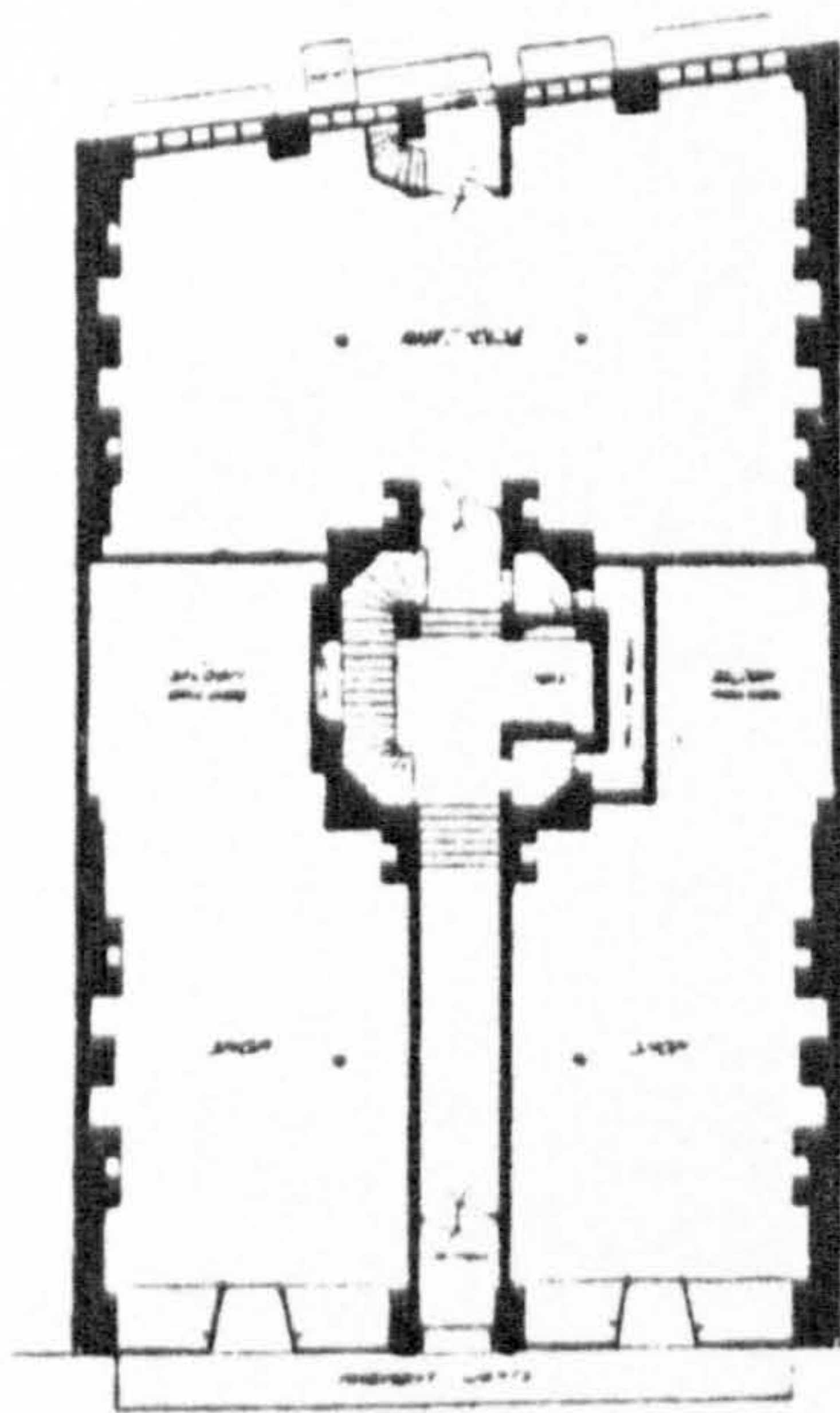


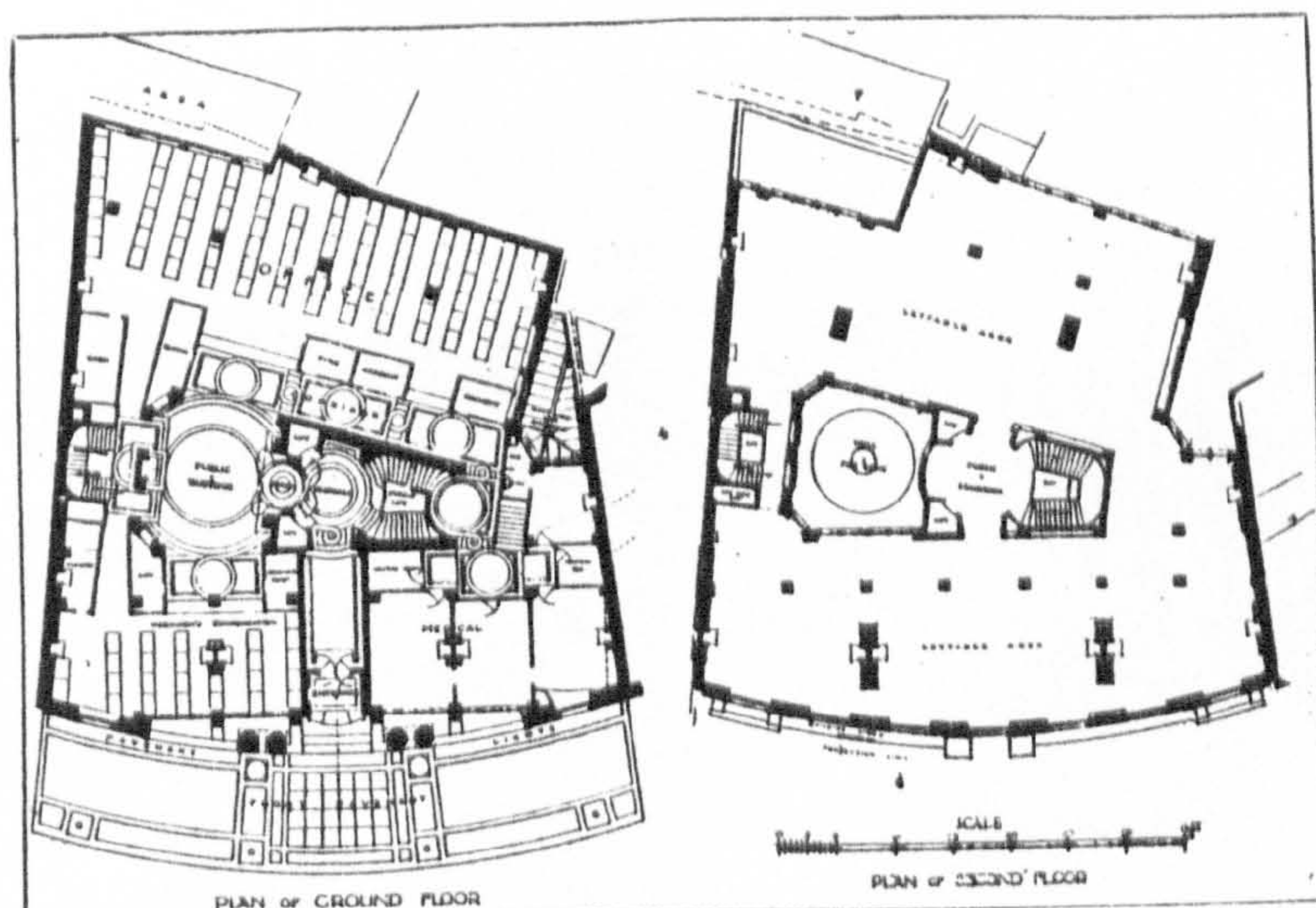
Plan of First Floor. THIS FLOOR IS AT PRESENT UNOCCUPIED, AND IS TO BE LET.

6-61

ELECTRA HOUSE, City, 1900
ATLANTIC CHAMBERS, Glasgow, 1900

6-62



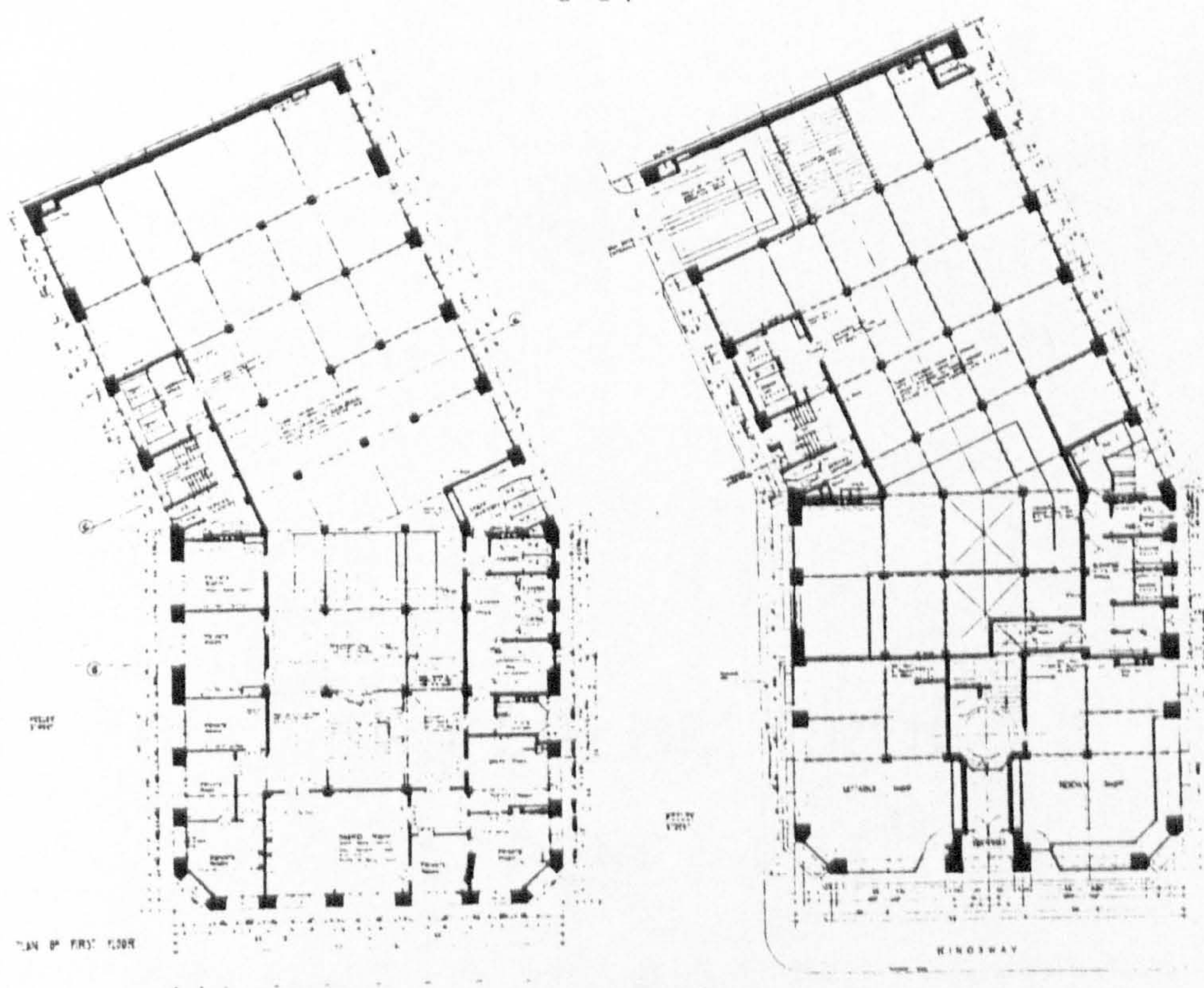


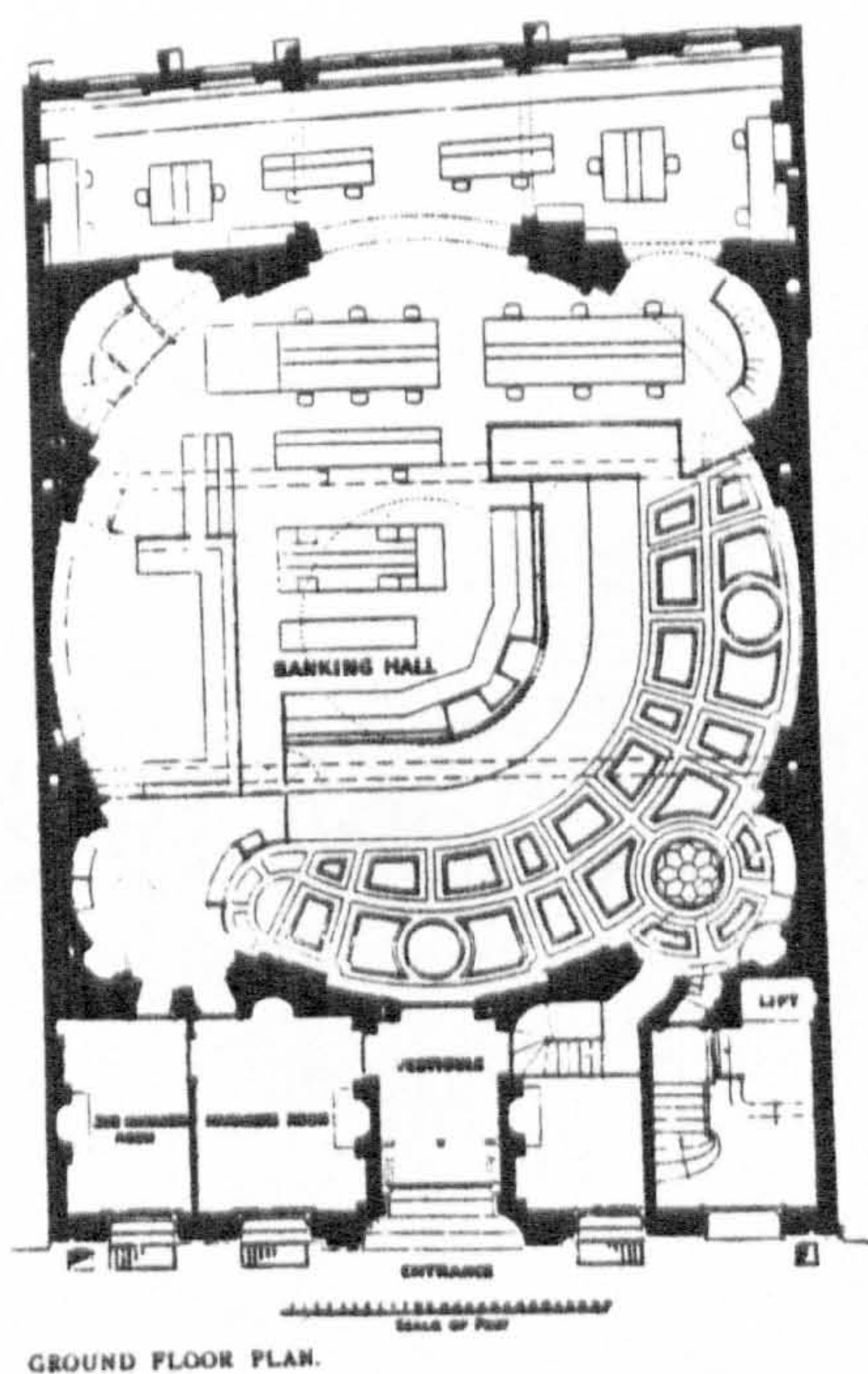
6-63

GENERAL ASSURANCE CO., Westminster, 1909

KODAK BUILDING, Westminster, 1911

6-64





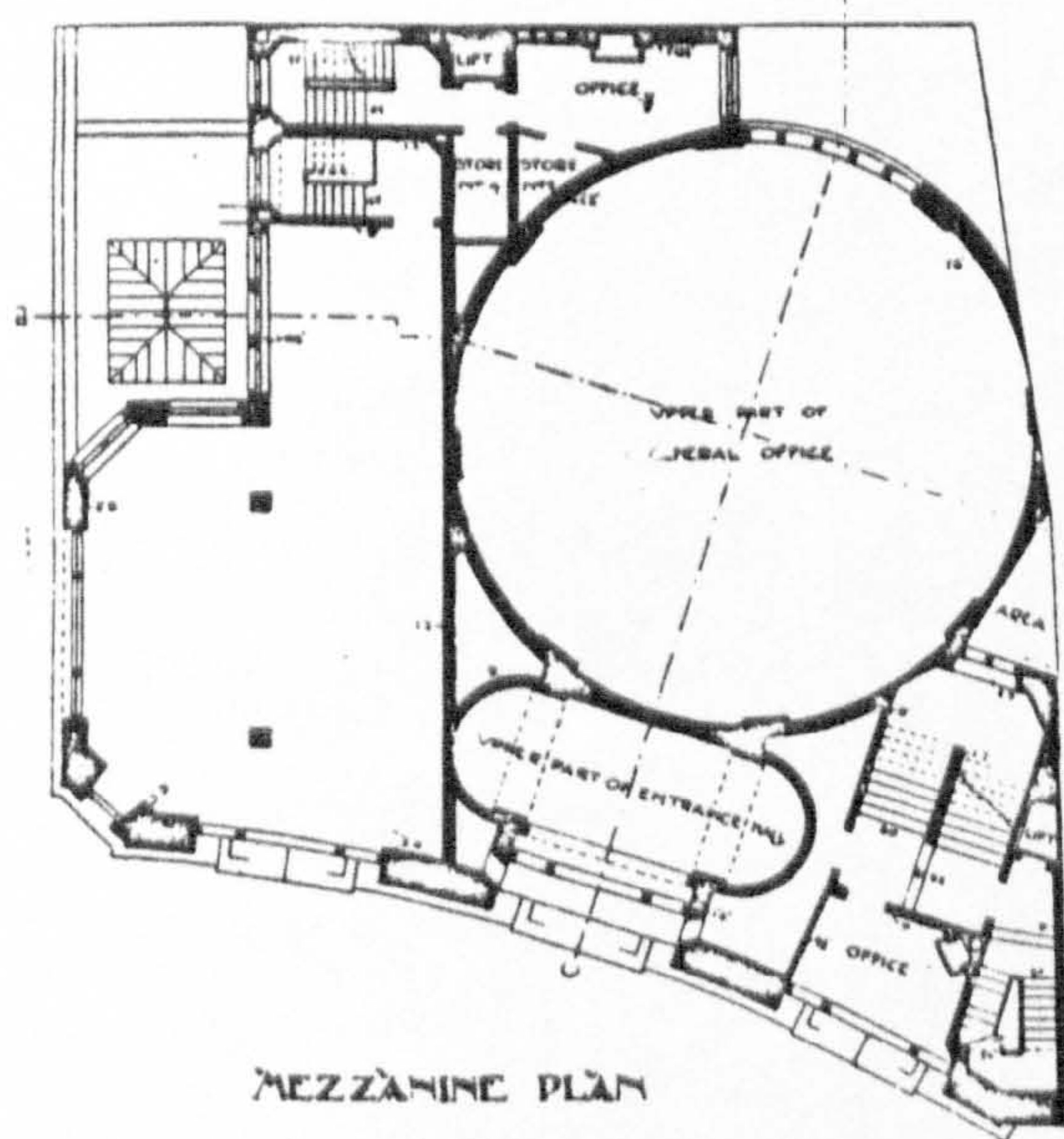
GROUND FLOOR PLAN.

6-65

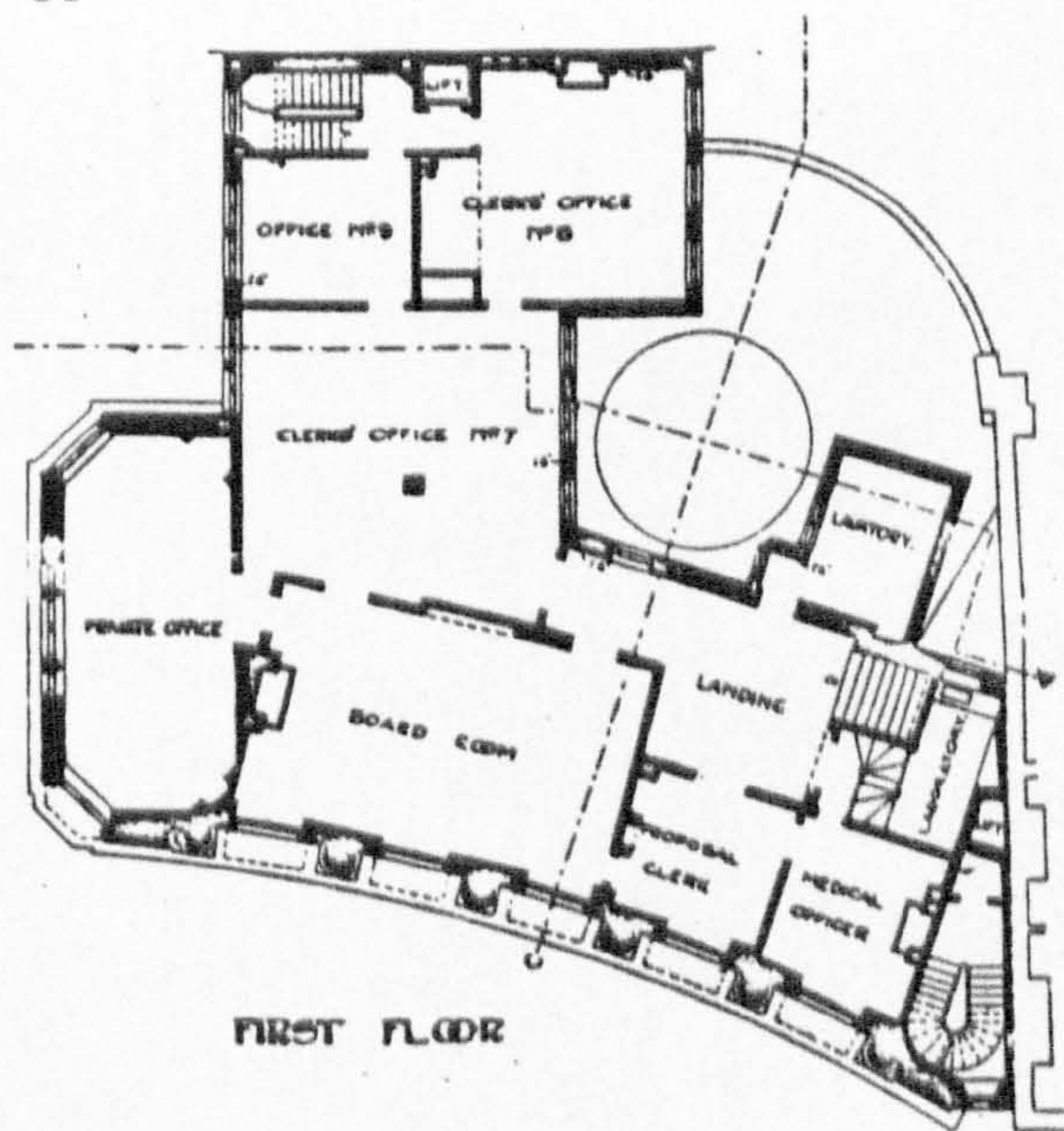
PARR'S BANK, Liverpool, 1901

UNITED KINGDOM PROVIDENT INSTITUTION, Westminster, 1906

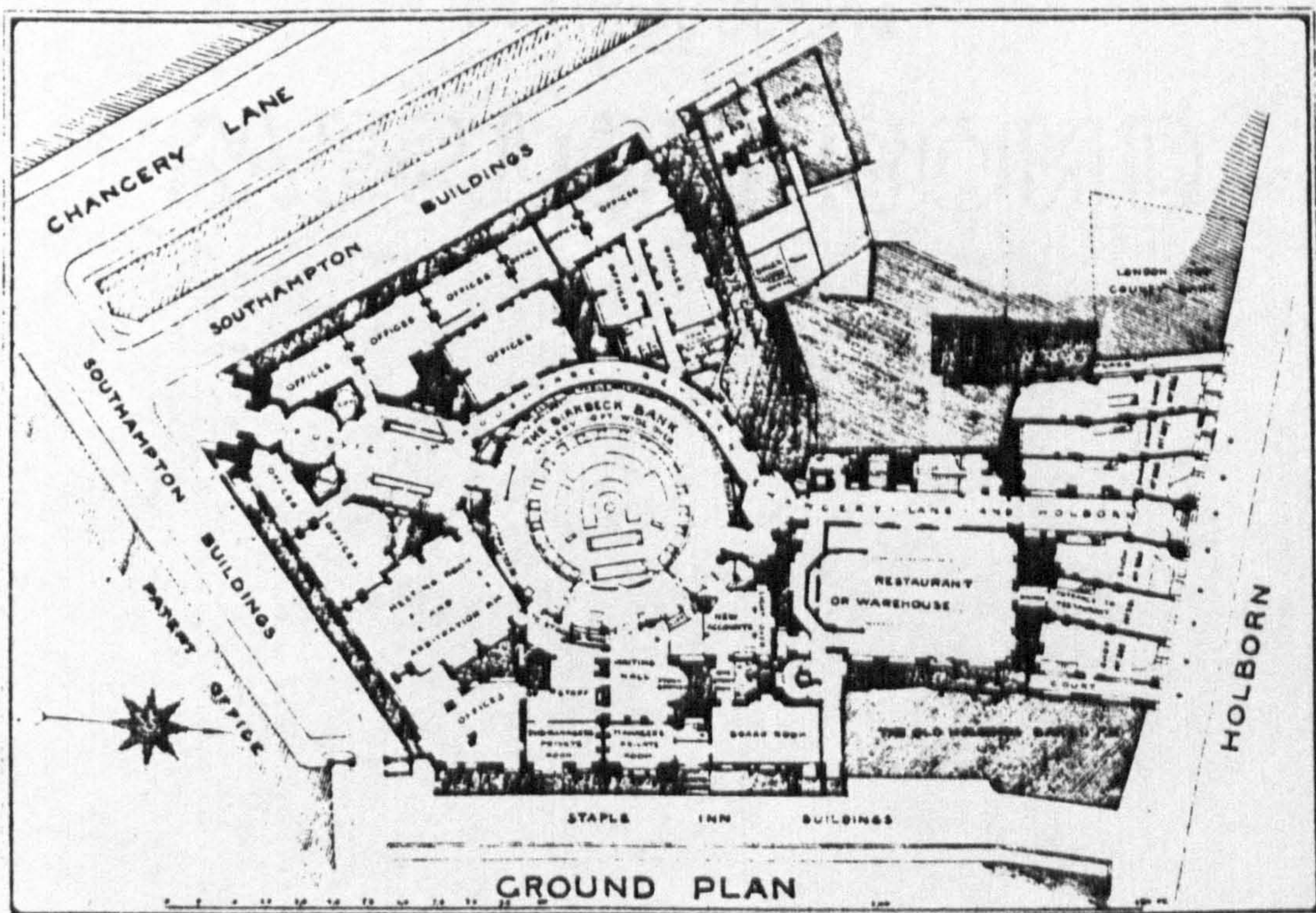
6-66



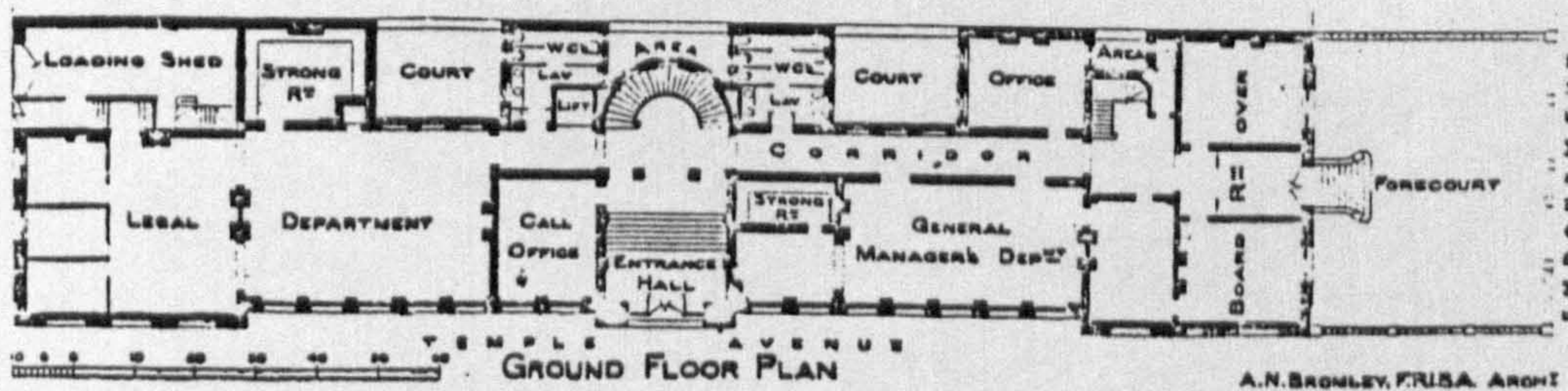
MEZZANINE PLAN

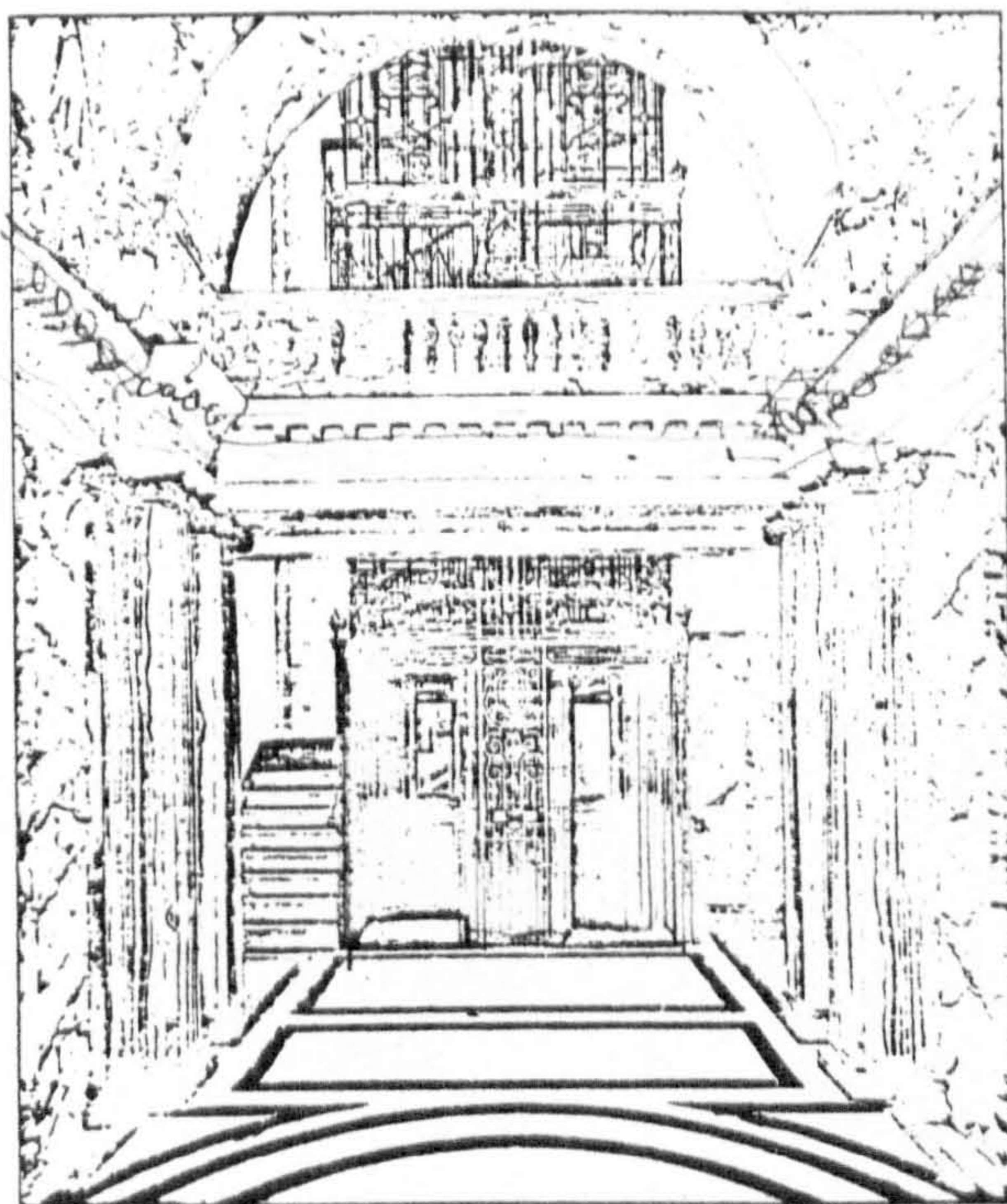


FIRST FLOOR



6-67
 BIRKBECK BANK, City, 1902
 NATIONAL TELEPHONE CO., City, 1900
 6-68

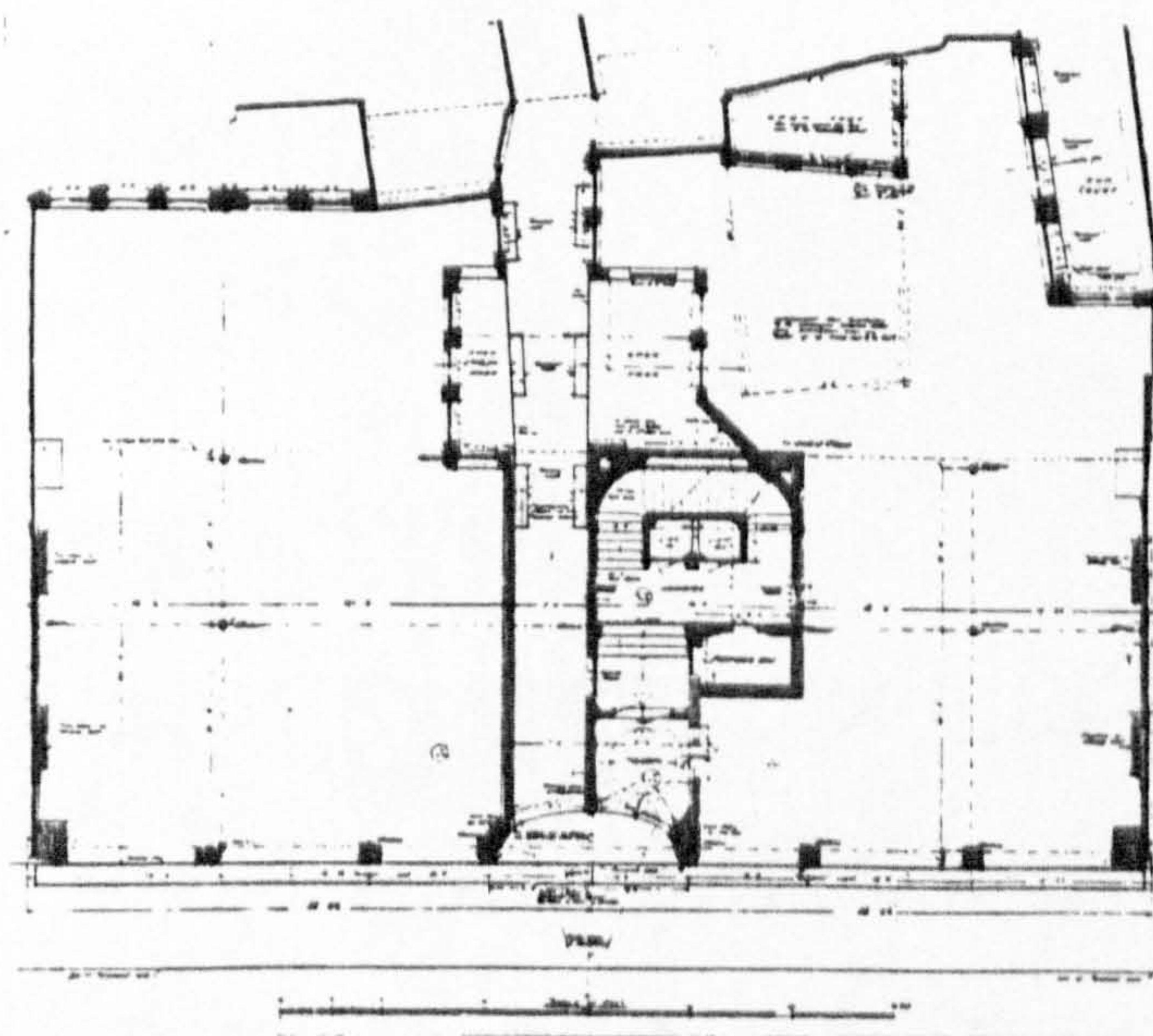




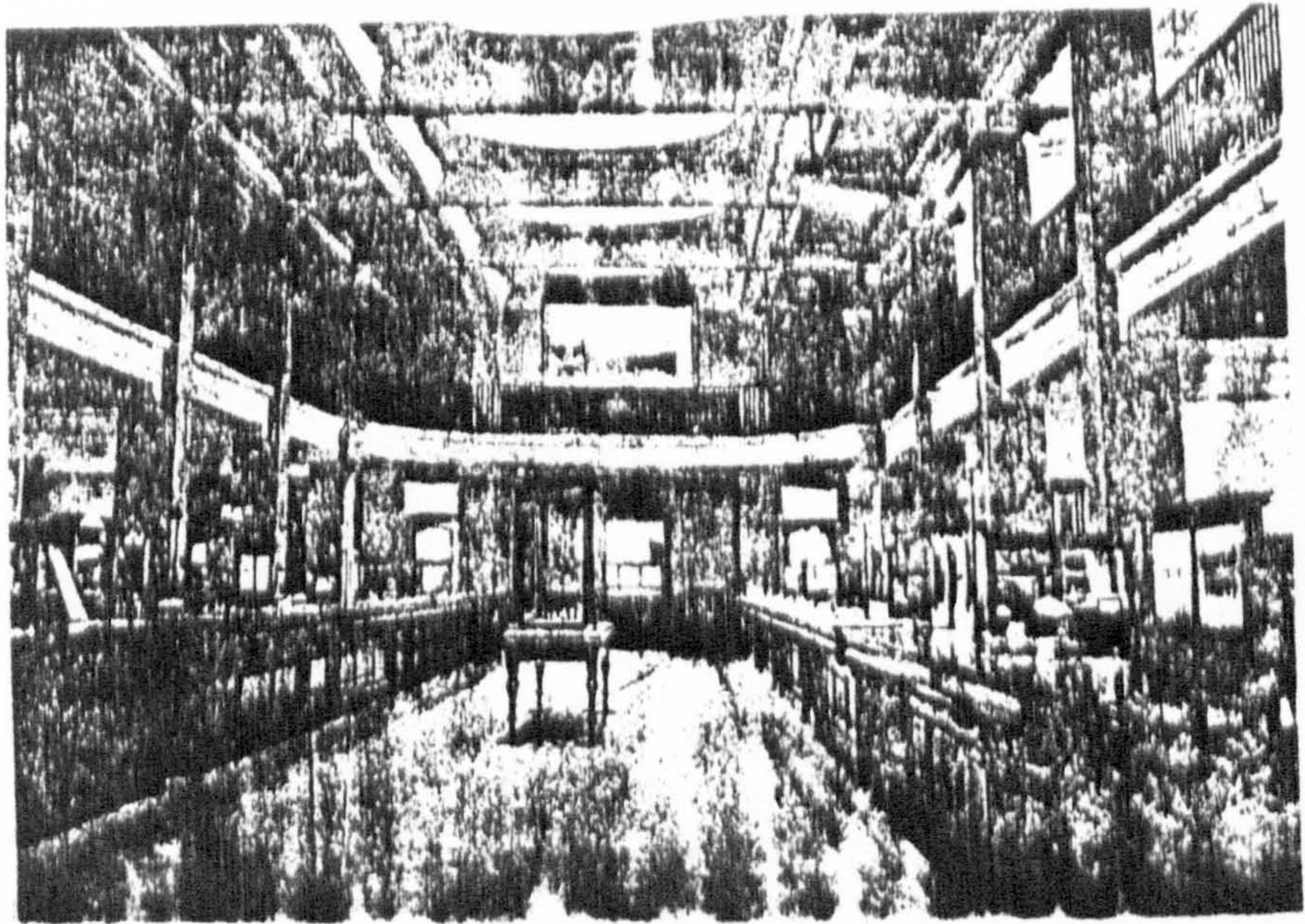
6-69

ROYAL INSURANCE BUILDING, City, 1912
43-53 MOORGATE ST., City, 1920

6-70



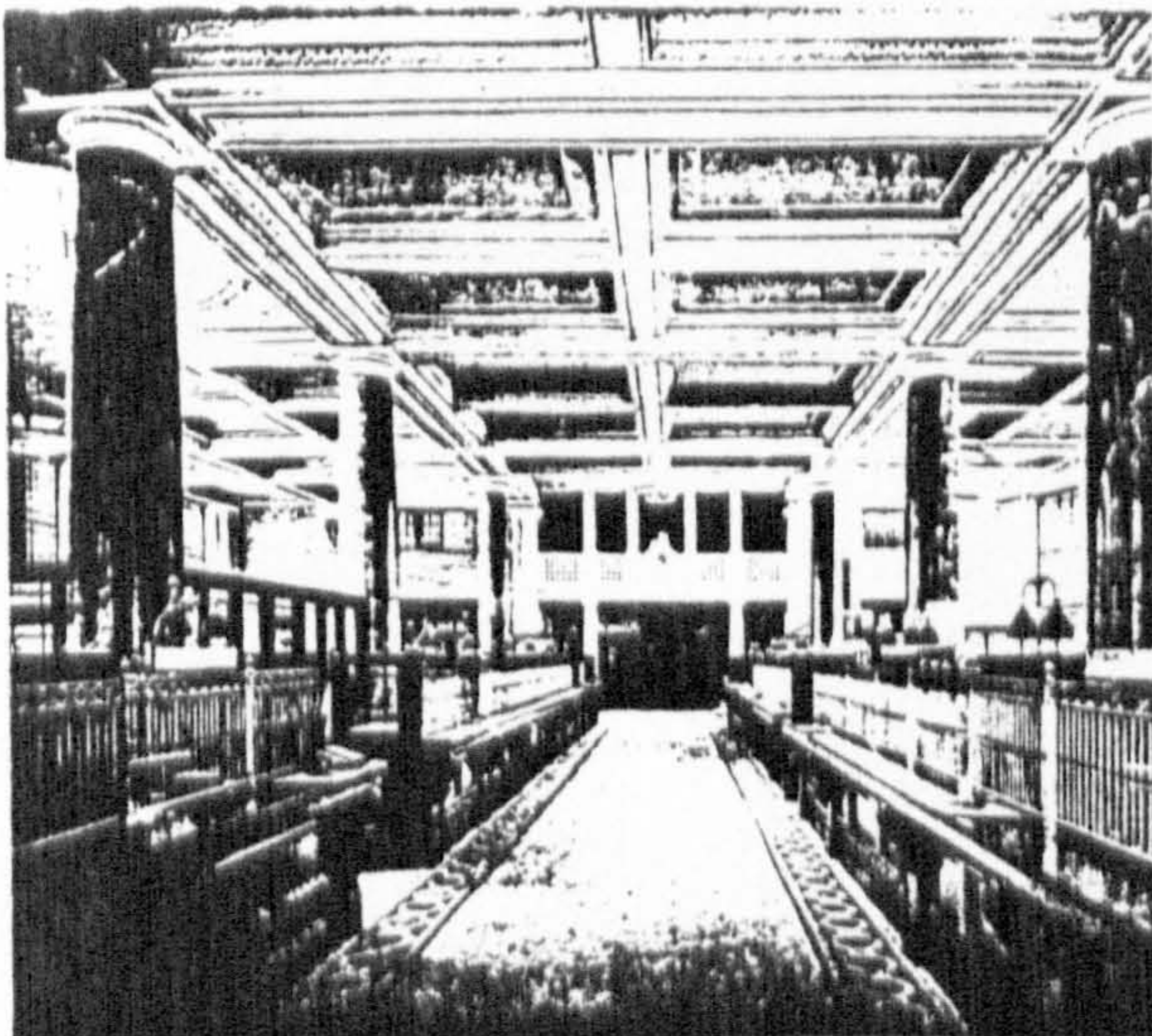
Nos. 43 to 53 MOORGATE STREET GROUND-FLOOR PLAN

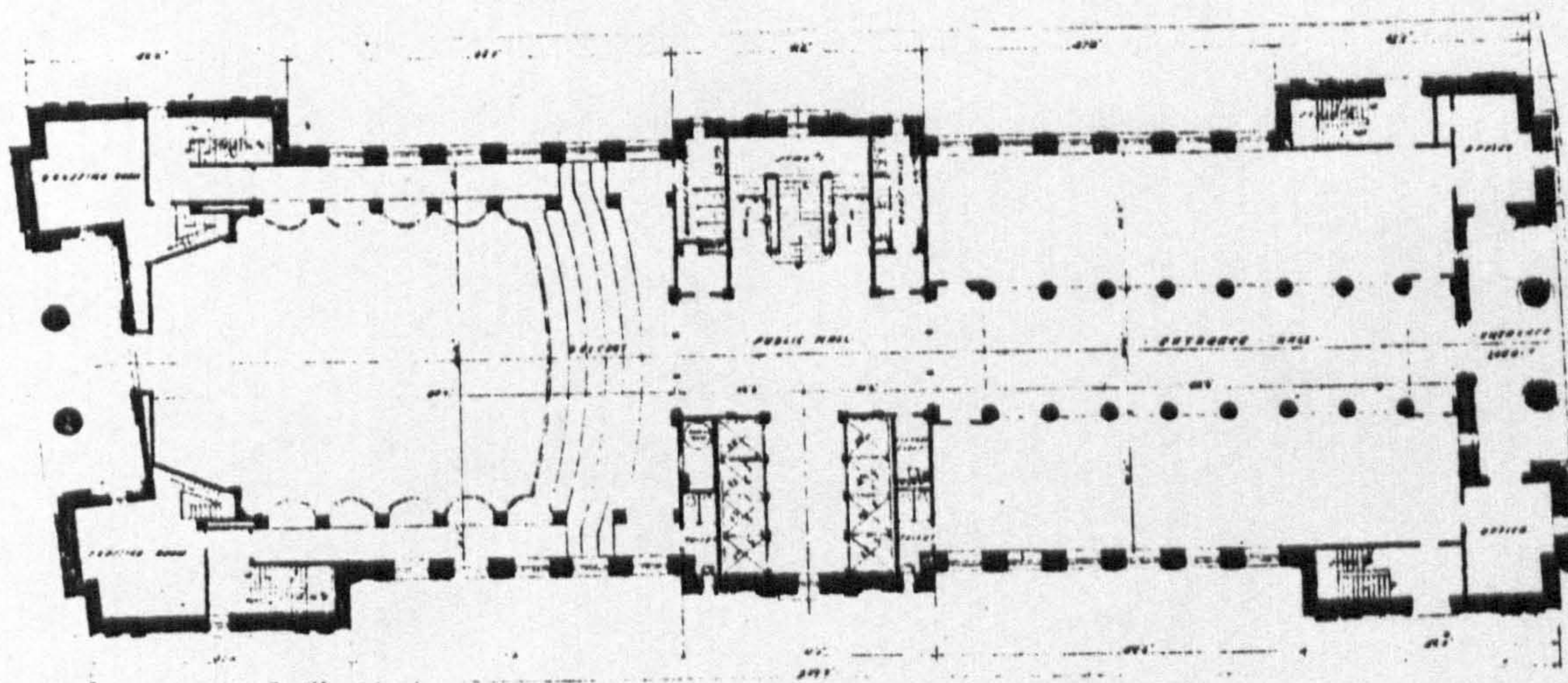


6-71

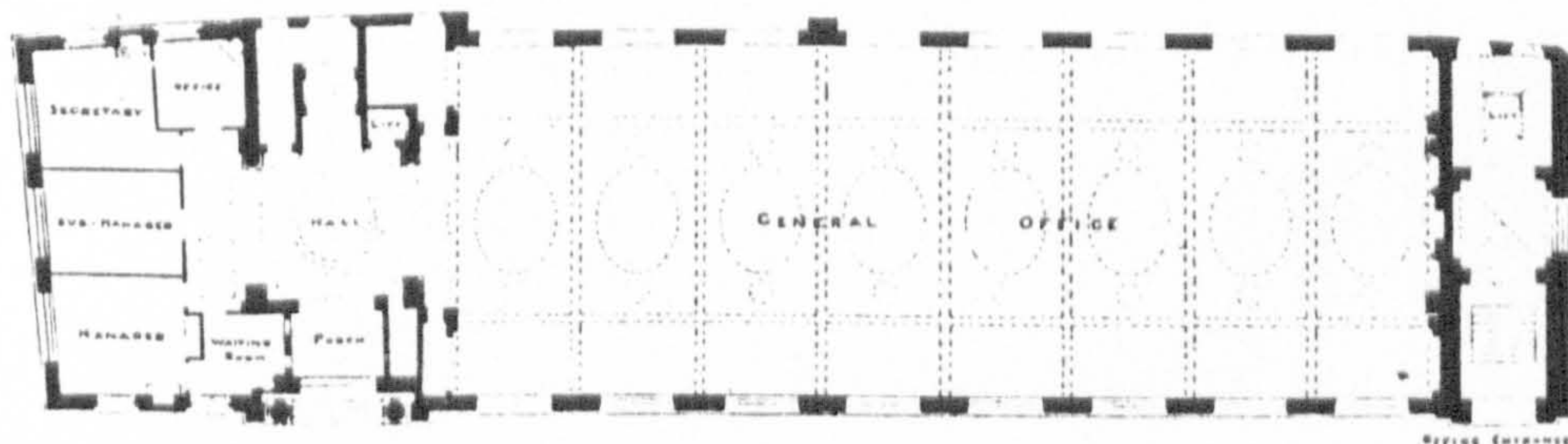
COLONIAL HOUSE, Liverpool, 1906
HONG KONG AND SHANGHAI BANK, City, 1914

6-72





6-73
BUSH HOUSE, Westminster, 1920



GROUND FLOOR PLAN.

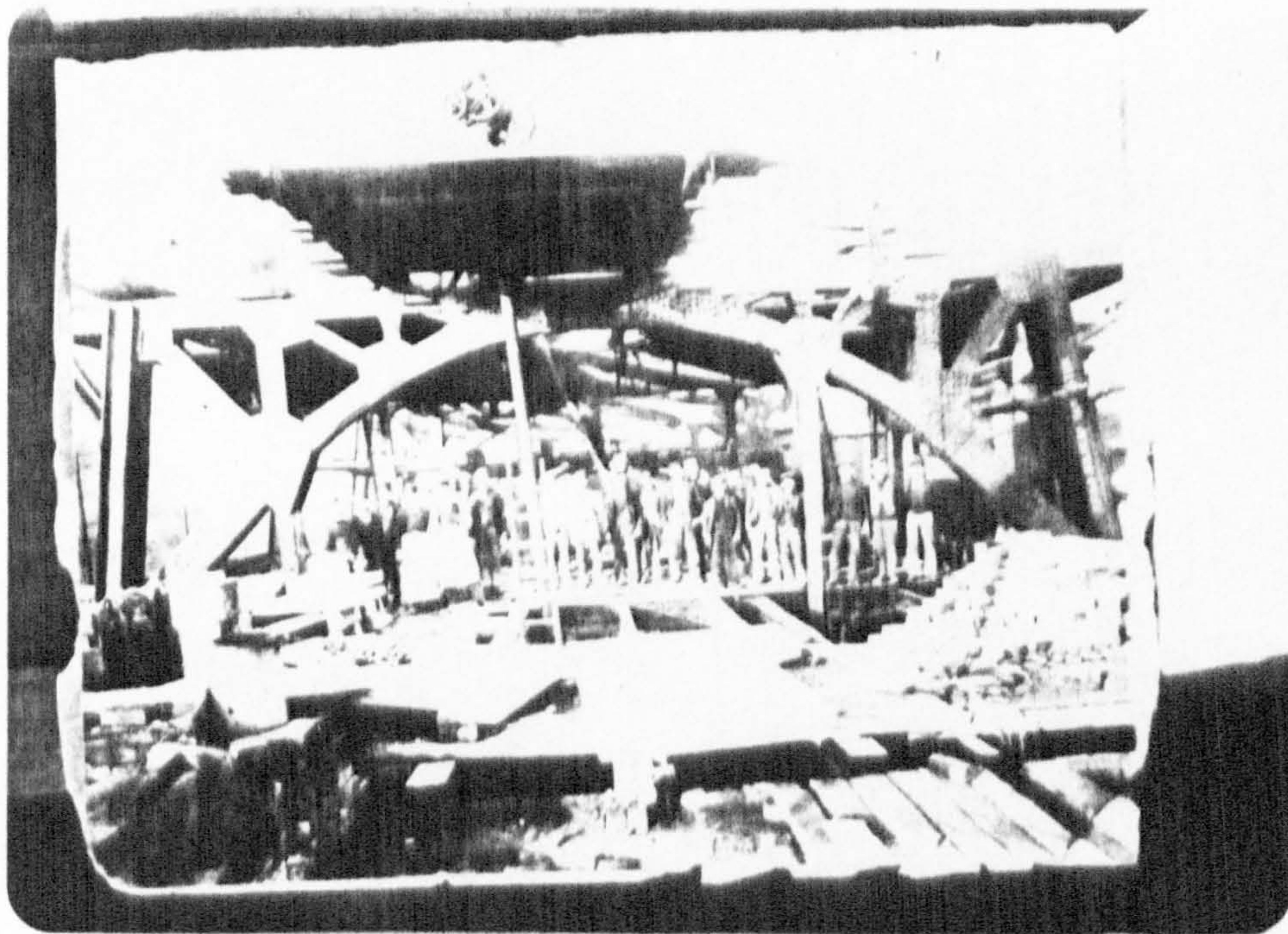
Scale
0 10 20 30 40 50 60 70 80 90 100
OF FEET

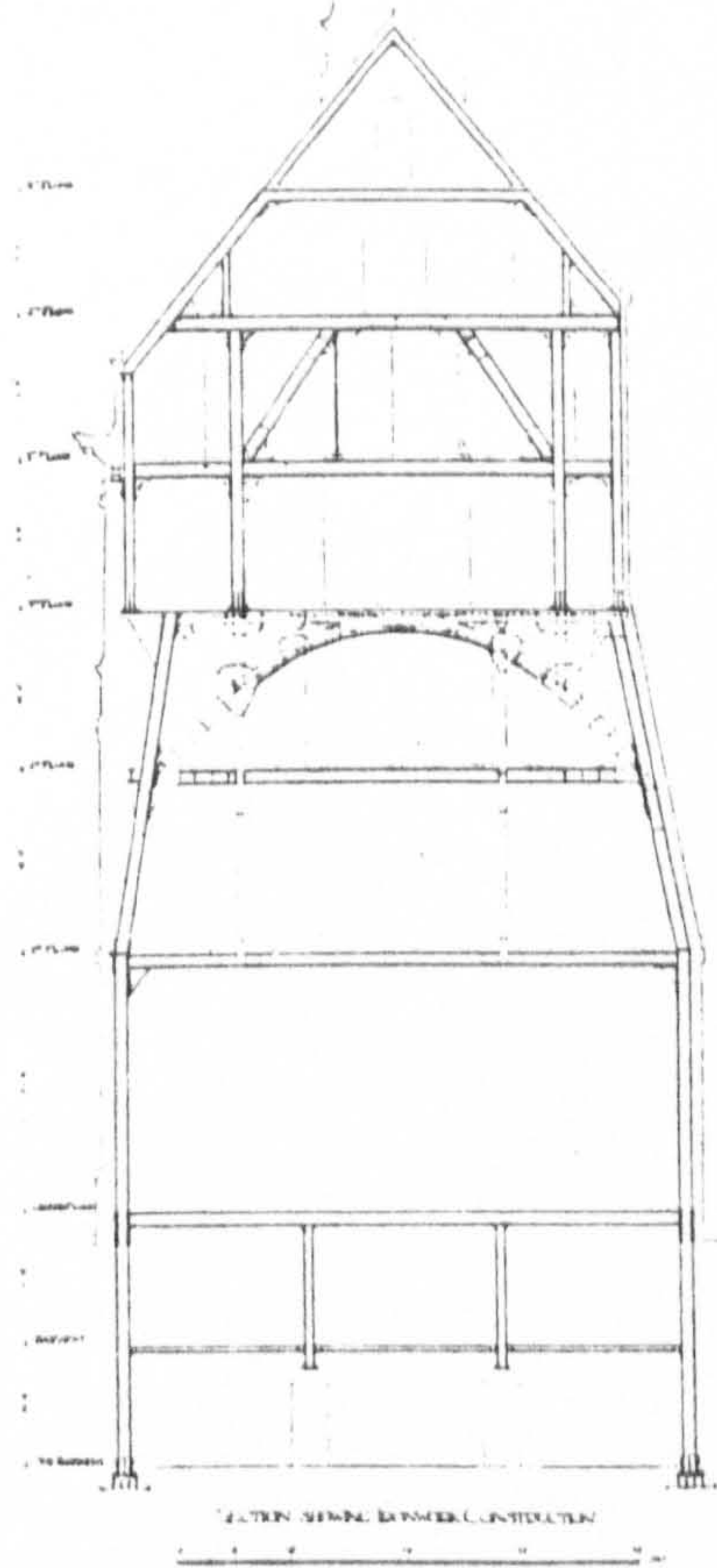
7-1

ROYAL INSURANCE BUILDING, Liverpool, 1900

ROYAL INSURANCE BUILDING, Liverpool, 1900

7-2

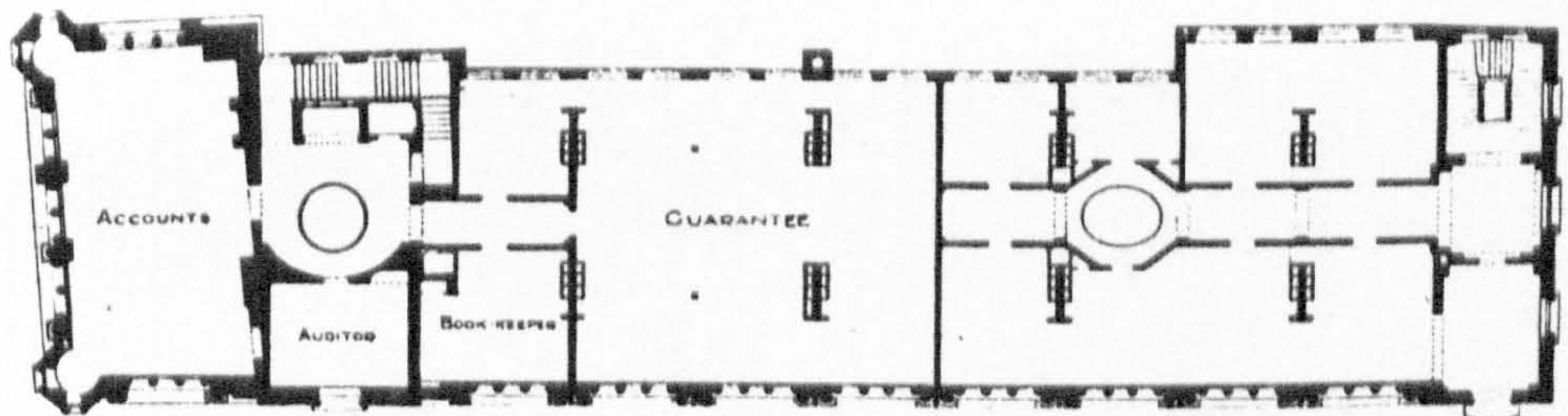




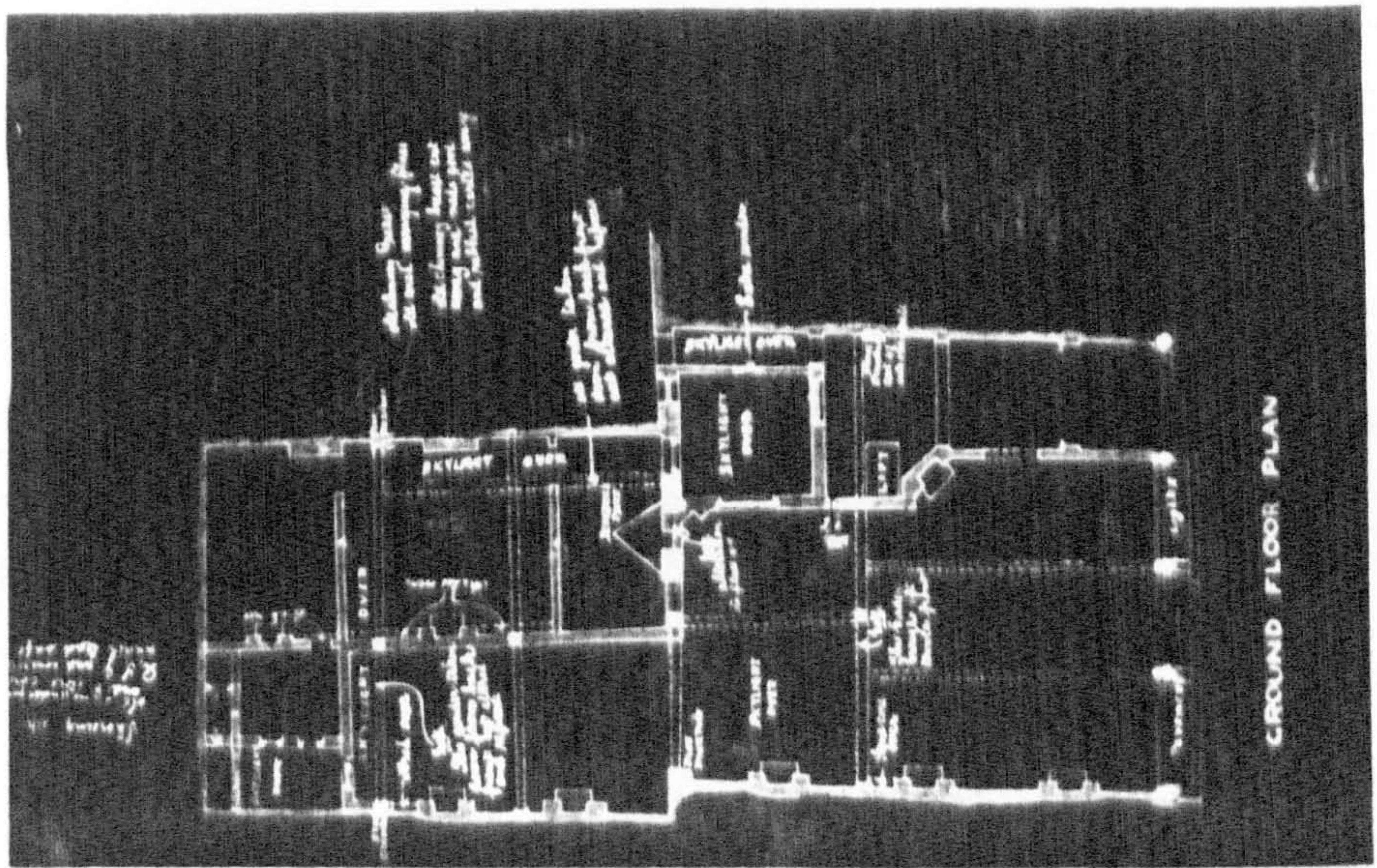
7-3

ROYAL INSURANCE BUILDING, Liverpool, 1900
ROYAL INSURANCE BUILDING, Liverpool, 1900

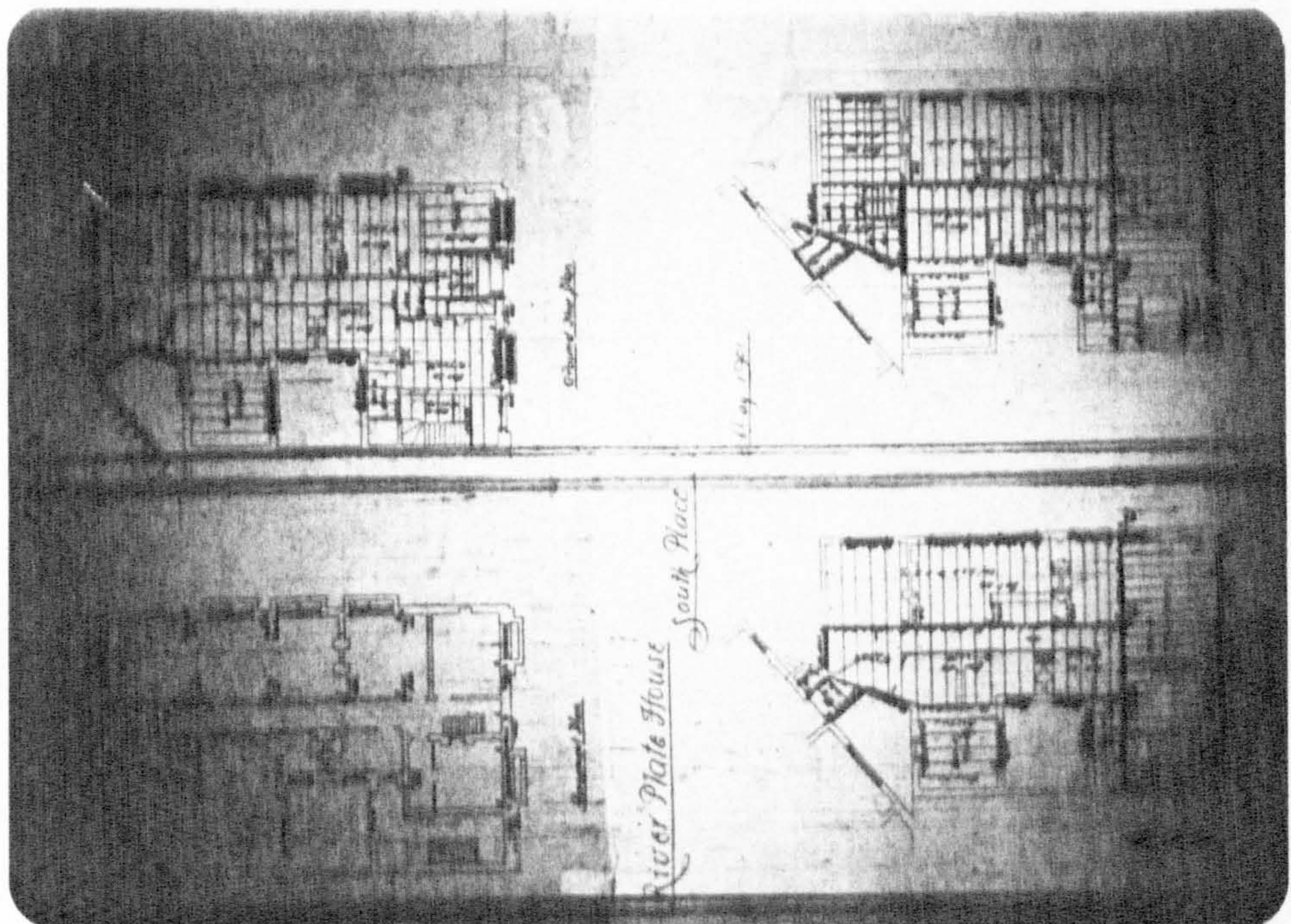
7-4

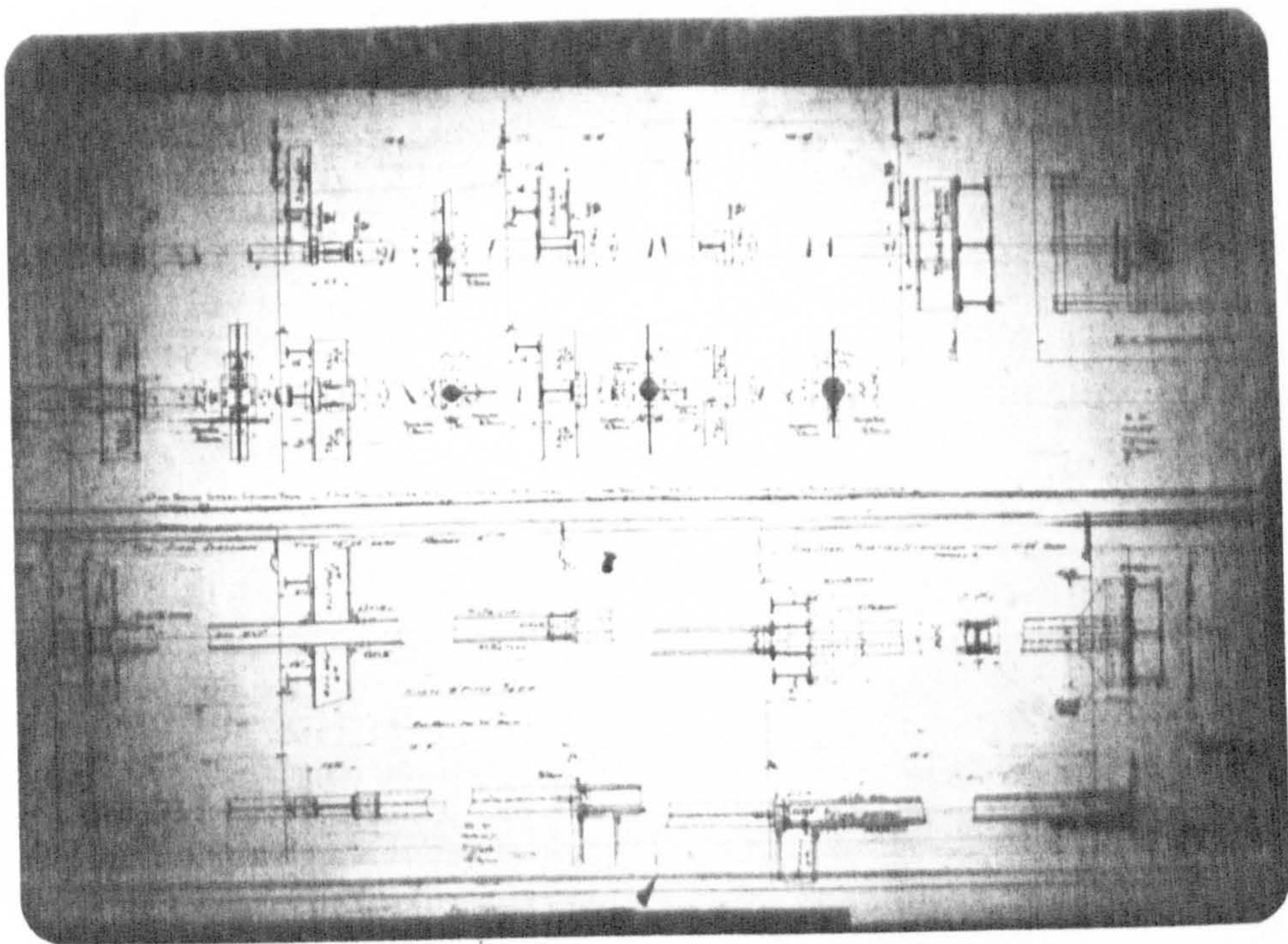


Scale
0 10 20 30 40 50 60 70 80 90 feet

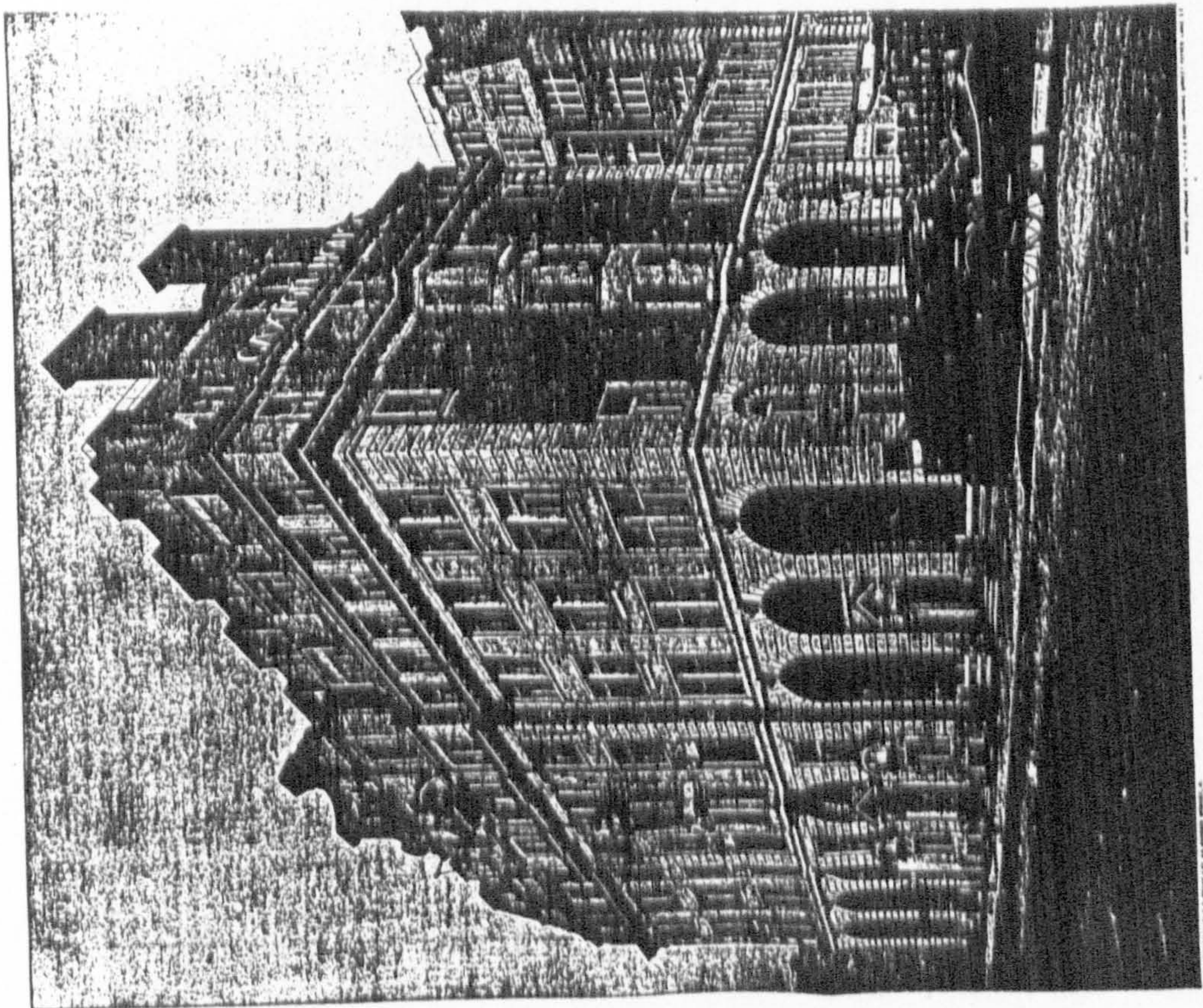


7-5
 3/5 ROOD LAND, City, 1899
 RIVER PLATE HOUSE FRAMING, City, 190-
 7-6

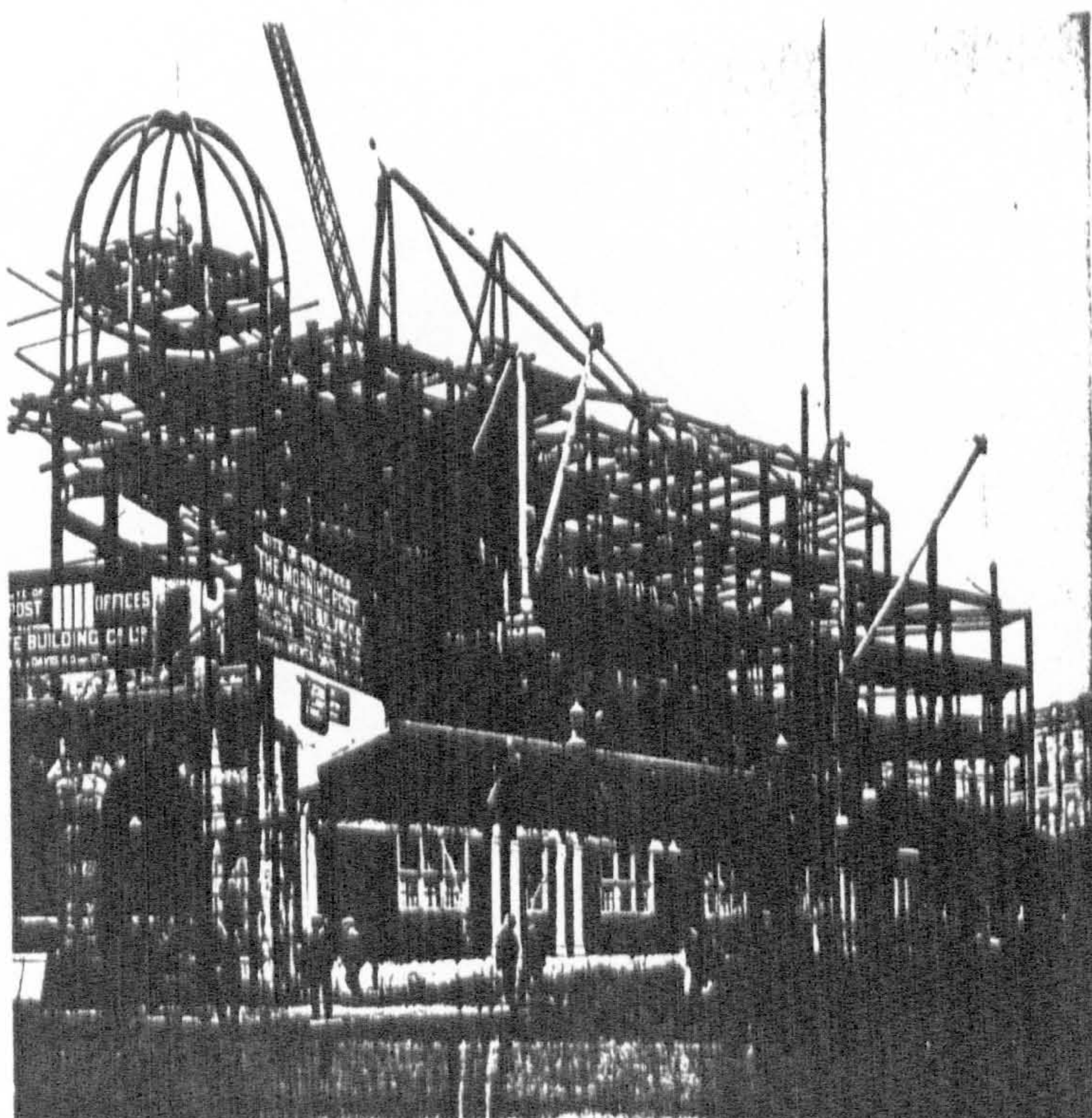




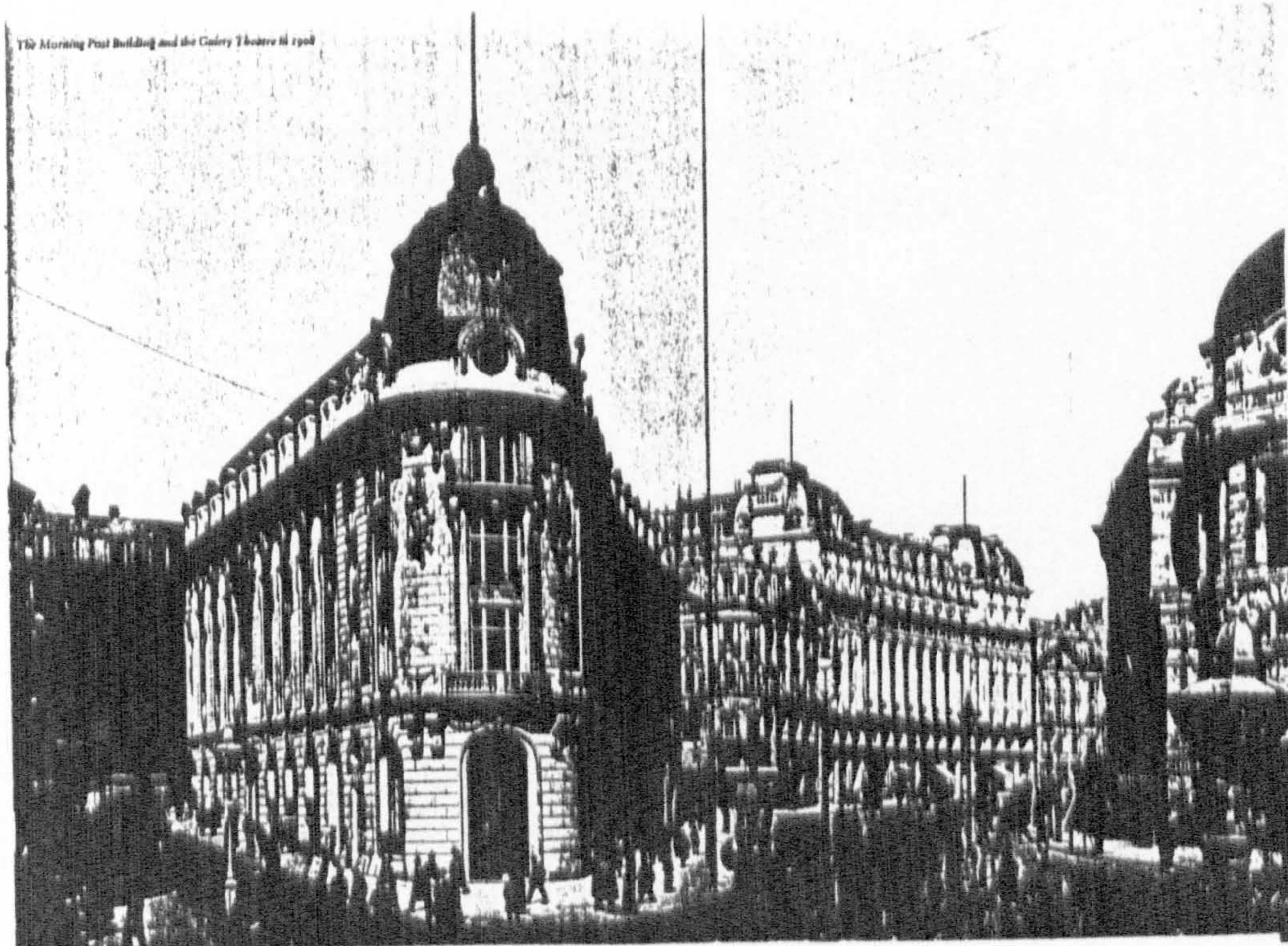
7-7
 RIVER PLATE HOUSE FRAMING, City, 190-
 CAXTON HOUSE, Westminster, 1905-06
 7-8



CAXTON HOUSE, WESTMINSTER—DR. J. S. GOSWAMI, F.R.I.B.A., ARCHT.
 GENERAL VIEW.



7-9
MORNING POST, Westminster, 1905
MORNING POST, Westminster, 1905
7-10



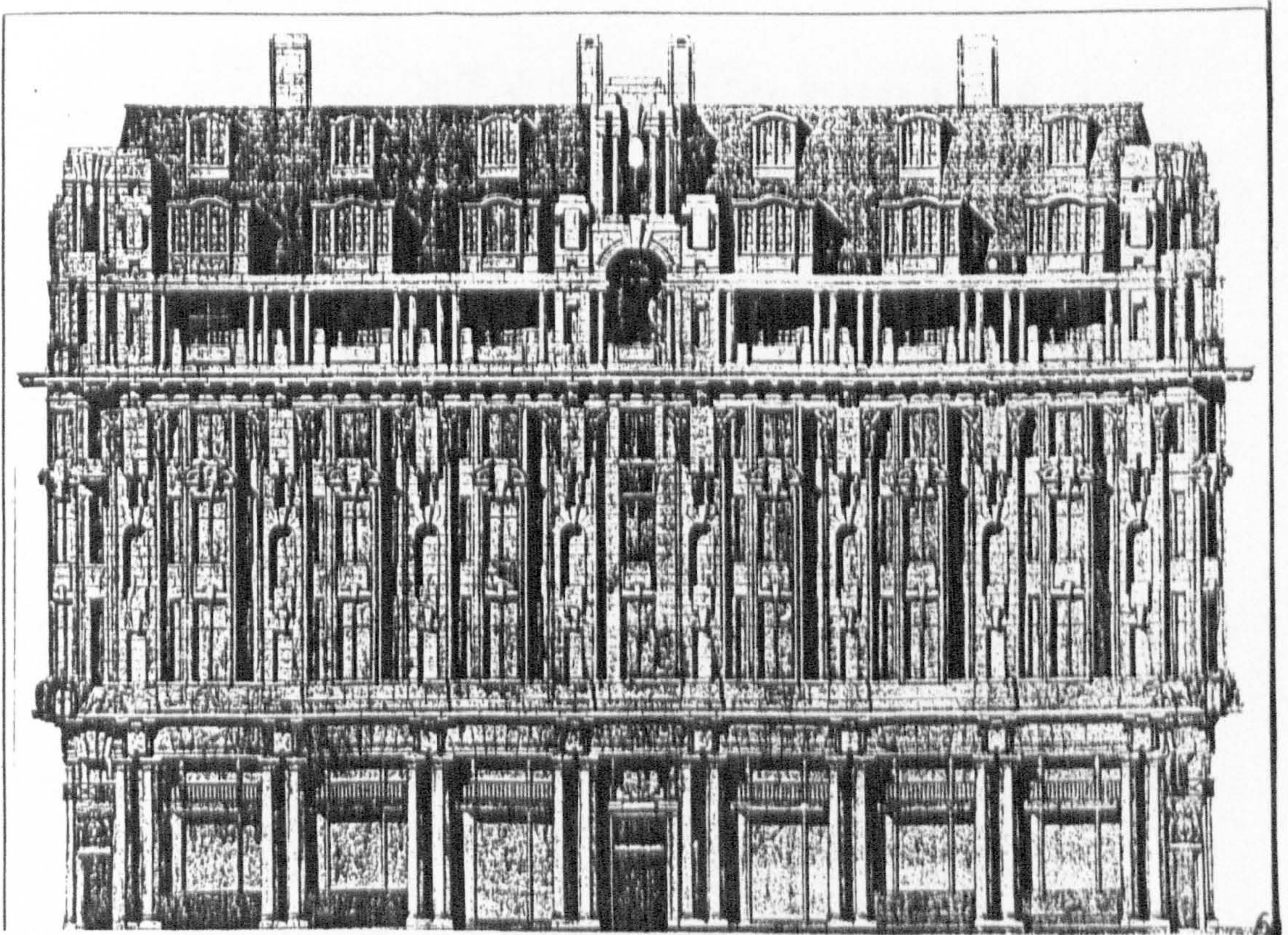


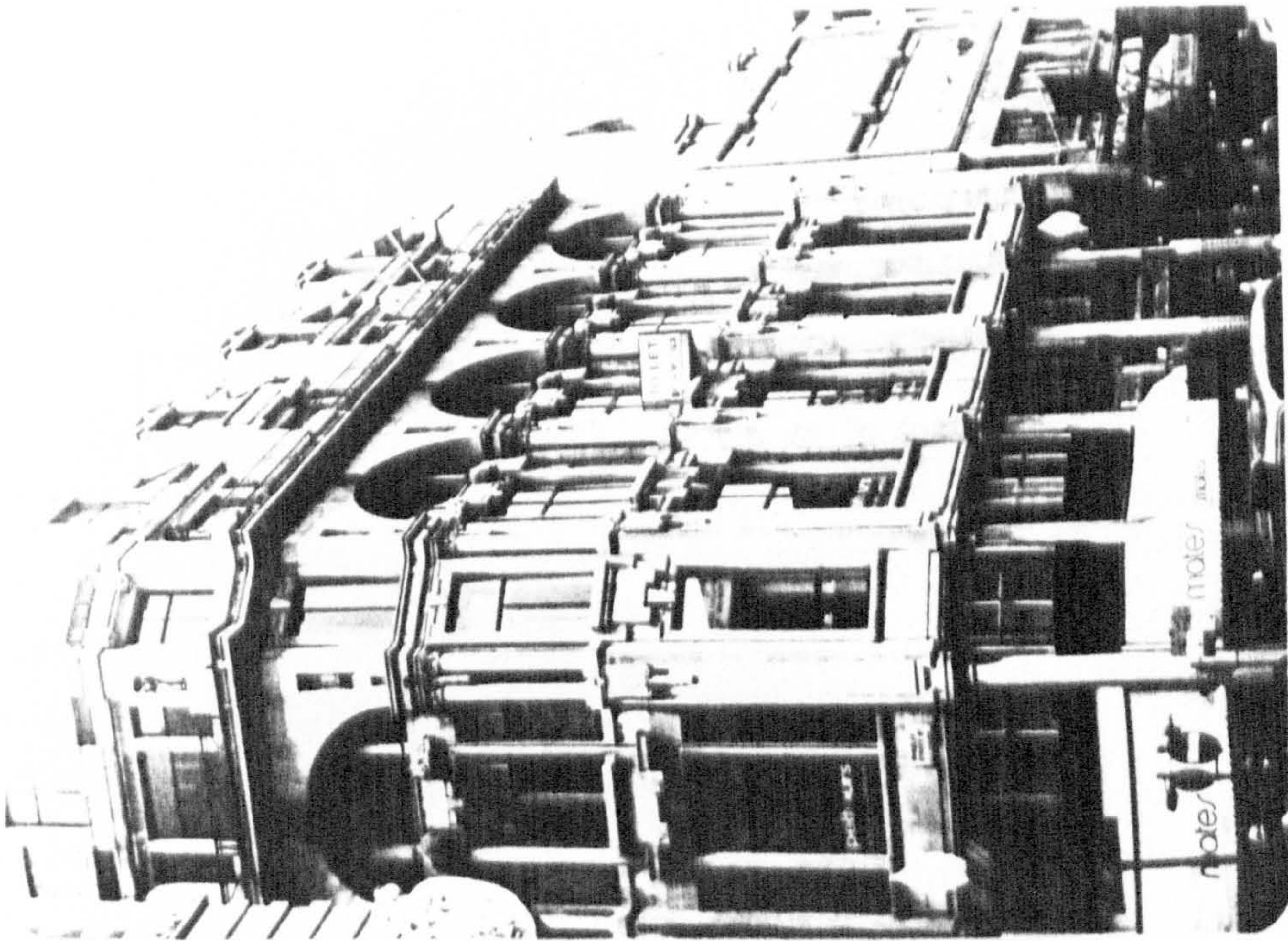
THE HAMBURG-AMERIKA LINE BUILDING, LONDON. GENERAL VIEW OF THE FRONT.
ARTHUR T. SUTTON AND STONE, PAUL AND STONE, ARCHITECTS.

7-11

HAMBURG AMERIKA LINIE, Westminster, 1908
ROYAL INSURANCE BUILDING (Original Design), Westminster, 1908

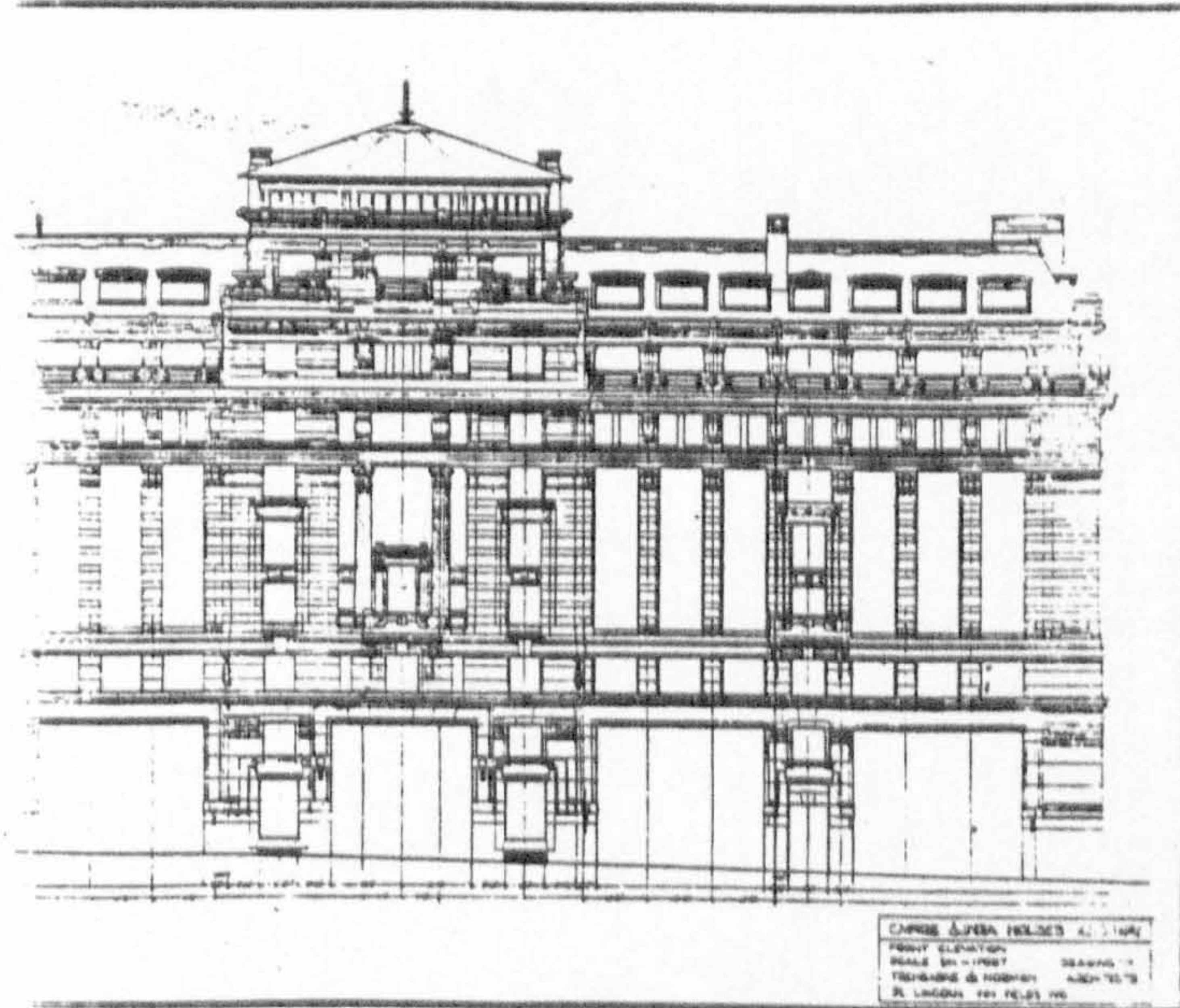
7-12





7-13

MAPPIN HOUSE, Westminister, 1910
EMPIRE AND INDIA HOUSES, Westminister, 1914
7-14



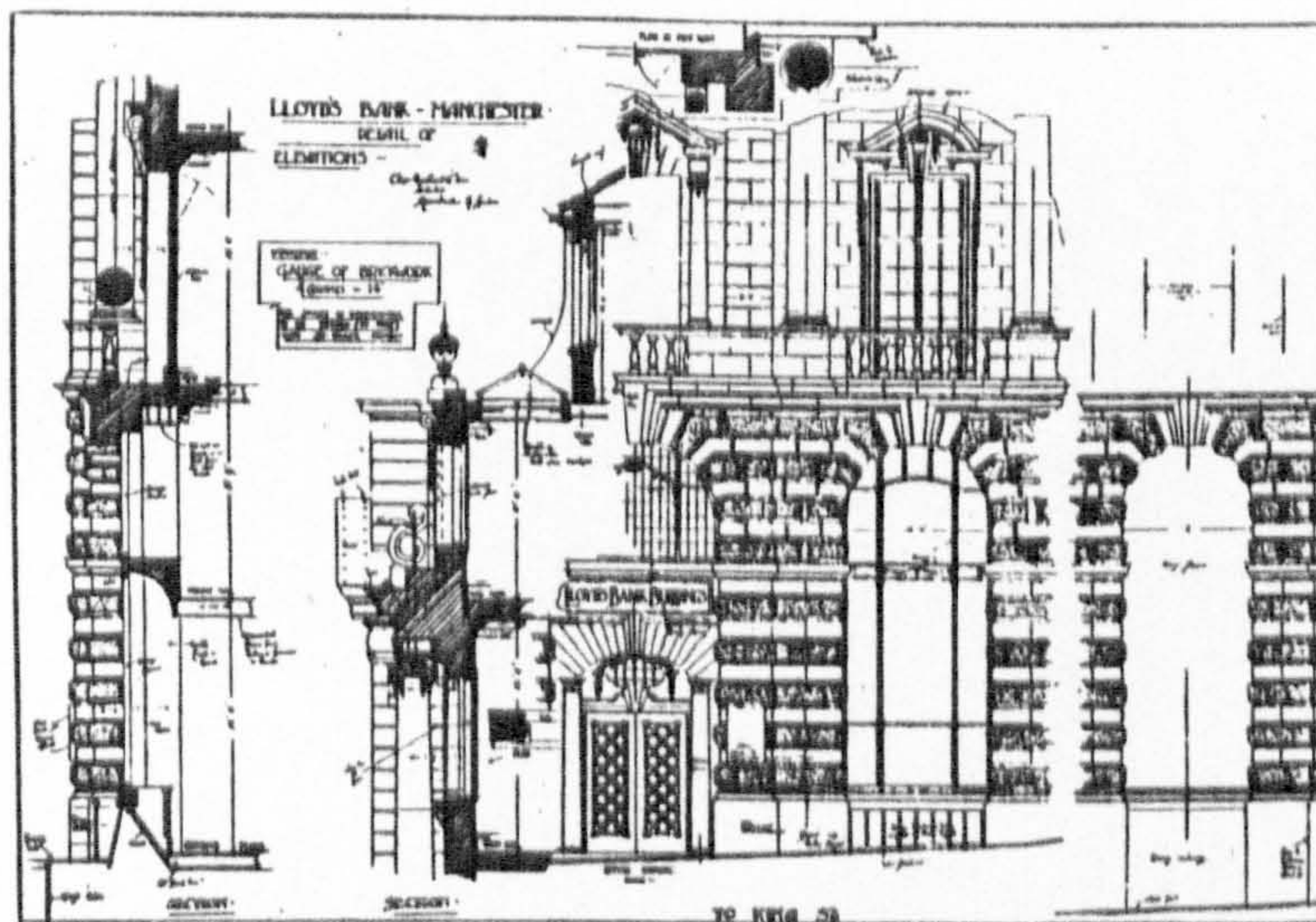


THE KODAK BUILDING, KINGSWAY LONDON
J. J. BURNET, L.L.B. A.R.C.A., ARCHITECT

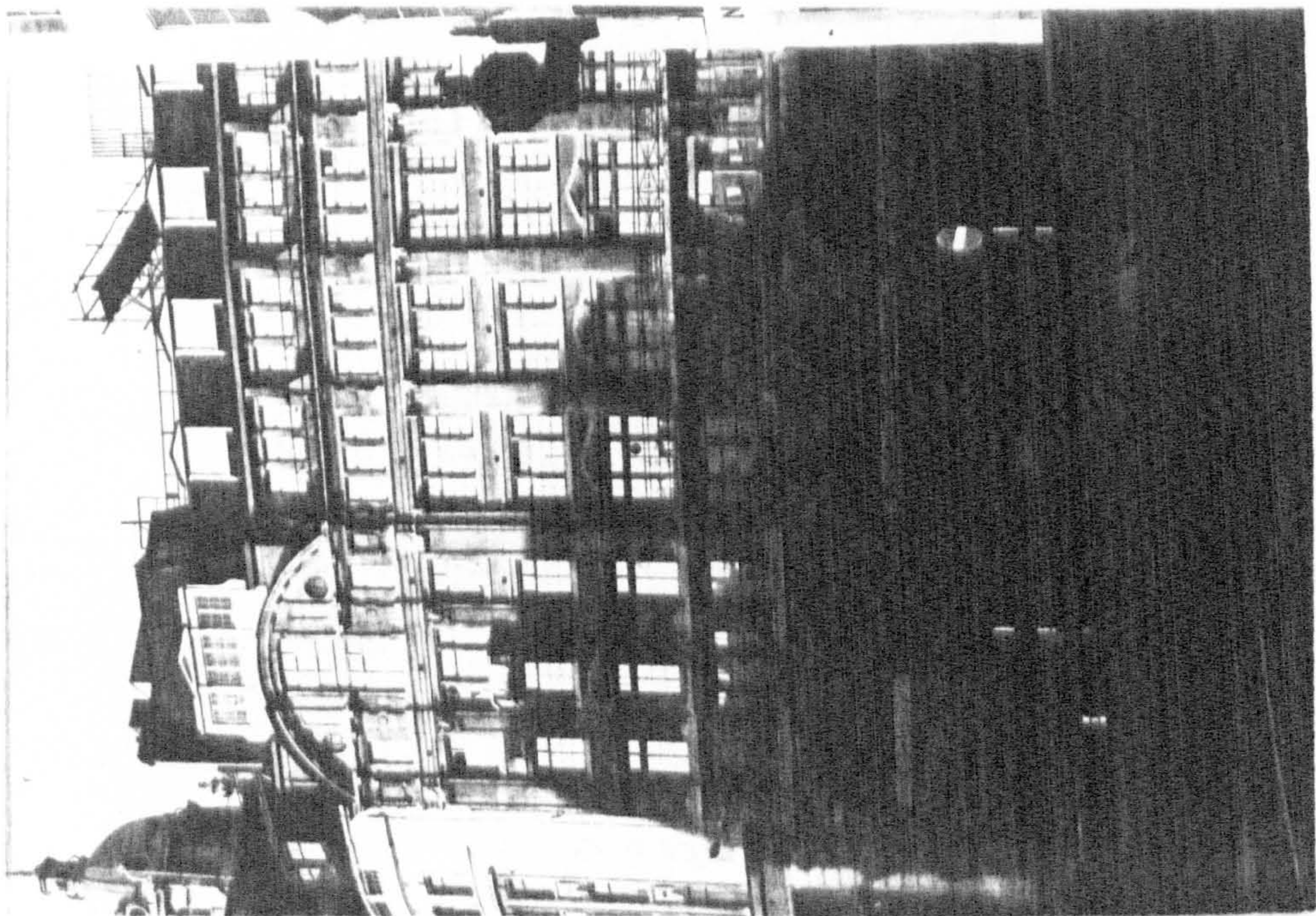
7-15

KODAK HOUSE, Westminster, 1911
LLOYDS BANK, Manchester, 1915

7-16



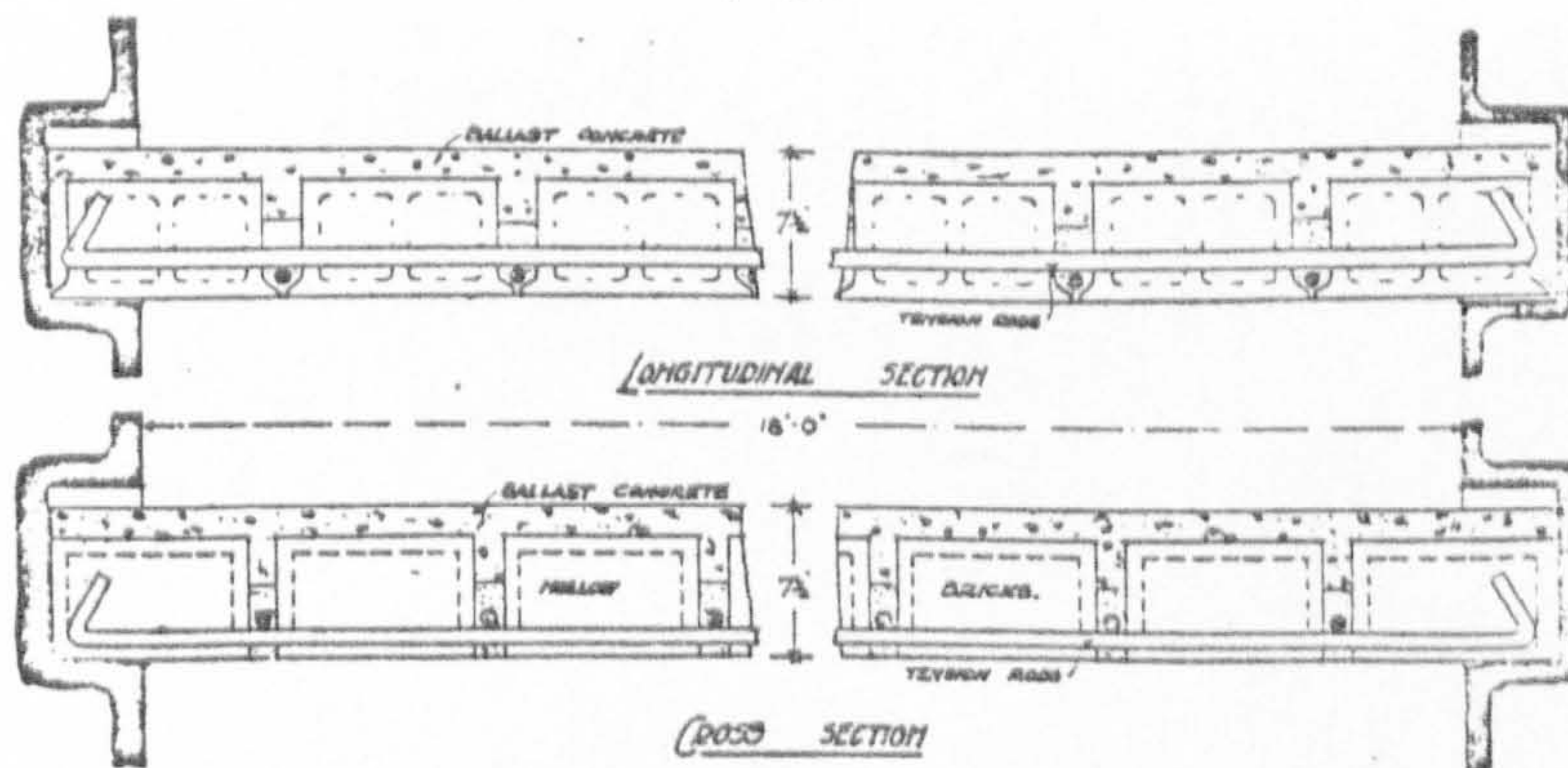
LLOYD'S BANK, KING STREET, MANCHESTER. MAROON DETAIL OF FACADE. - Messrs. CHARLES HEATHCOTE and ROSS, Architects.



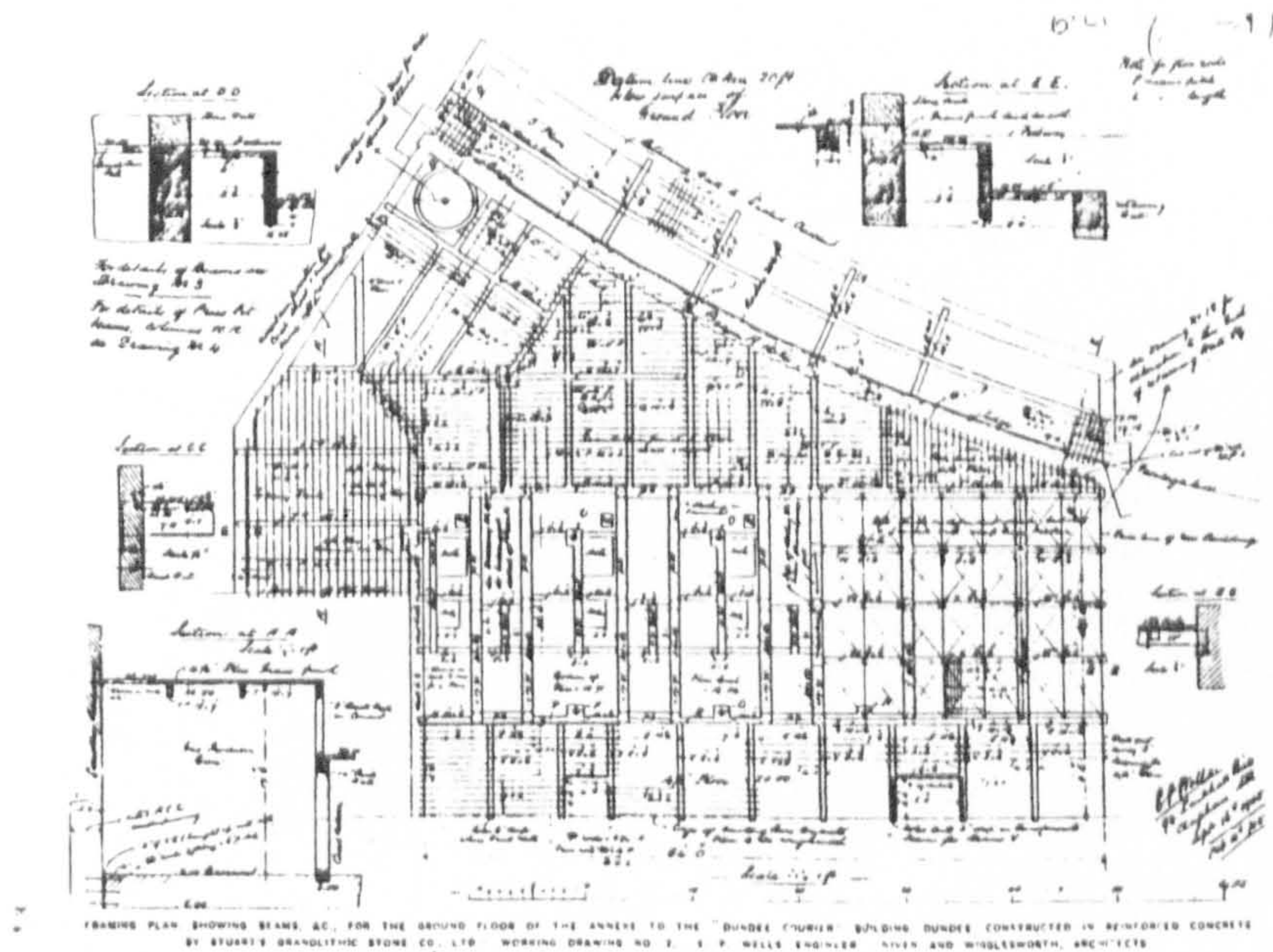
7-17

COMMERCIAL BANK, City, 1914
KLEINE FLOOR/Middleton, 1909

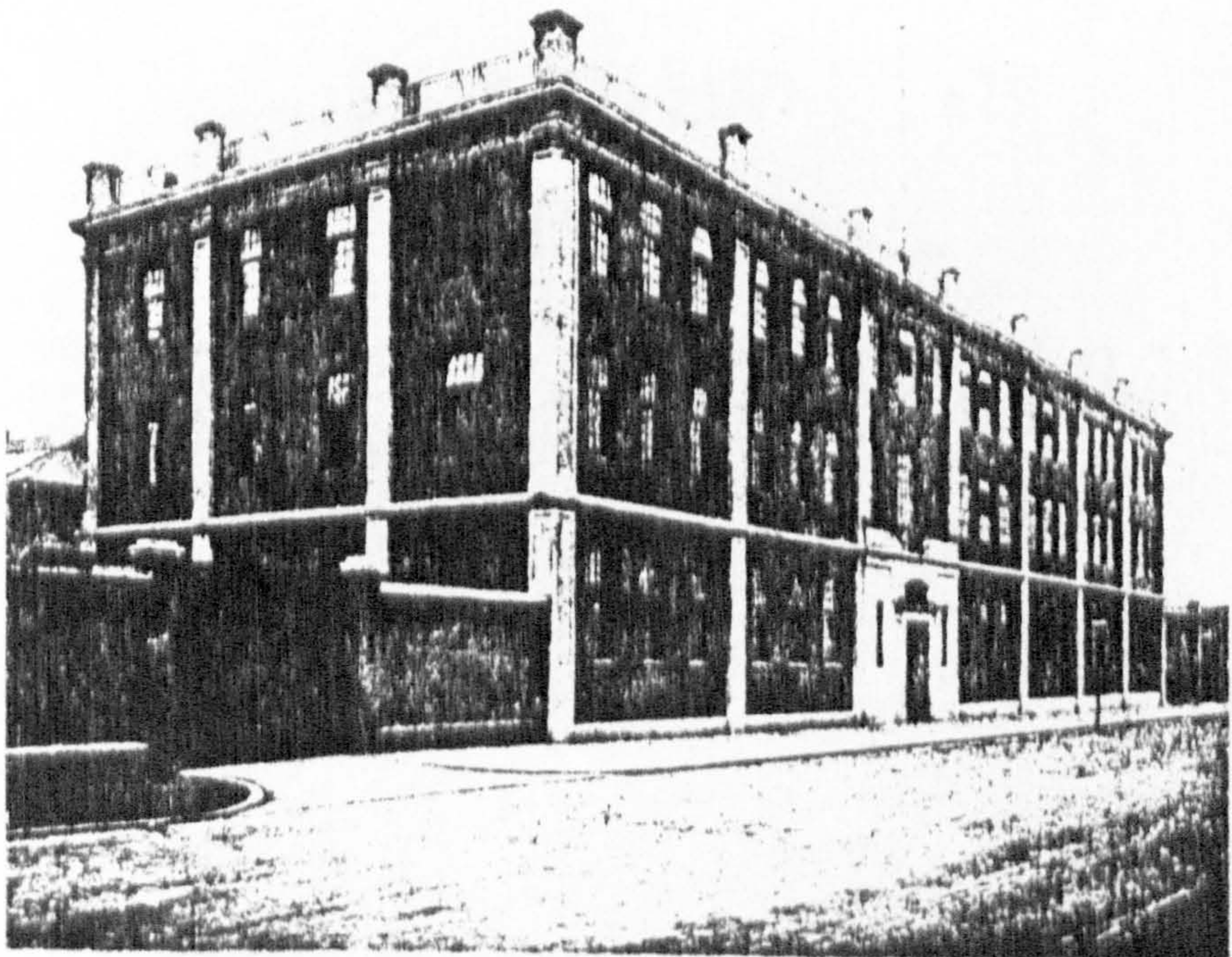
7-18

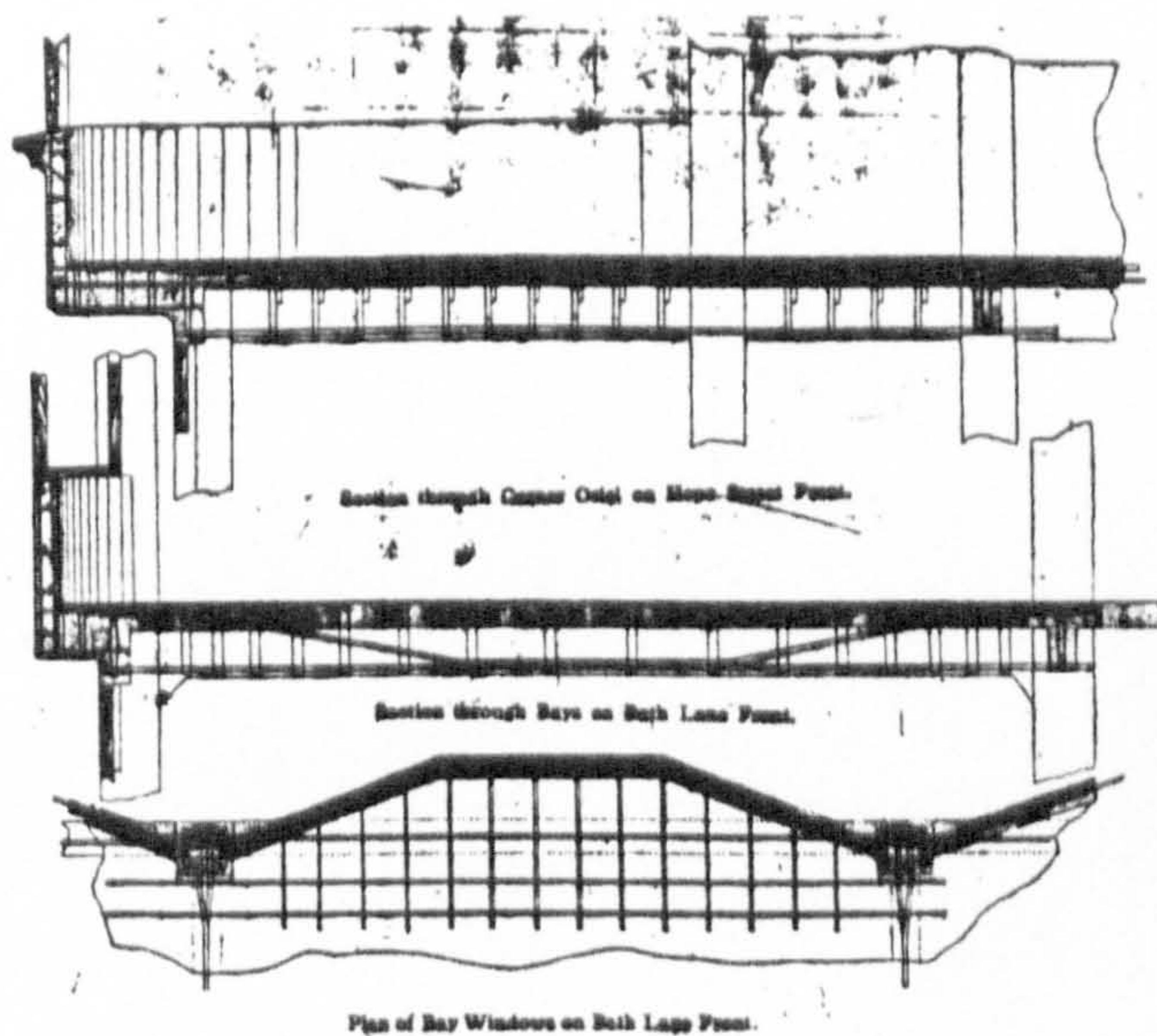


NEW KLEINE FLOOR.



7-19
 DUNDEE COURIER, Dundee, 1906
 ALEX. STEPHEN AND SONS, Clydeside, 1916
 7-20



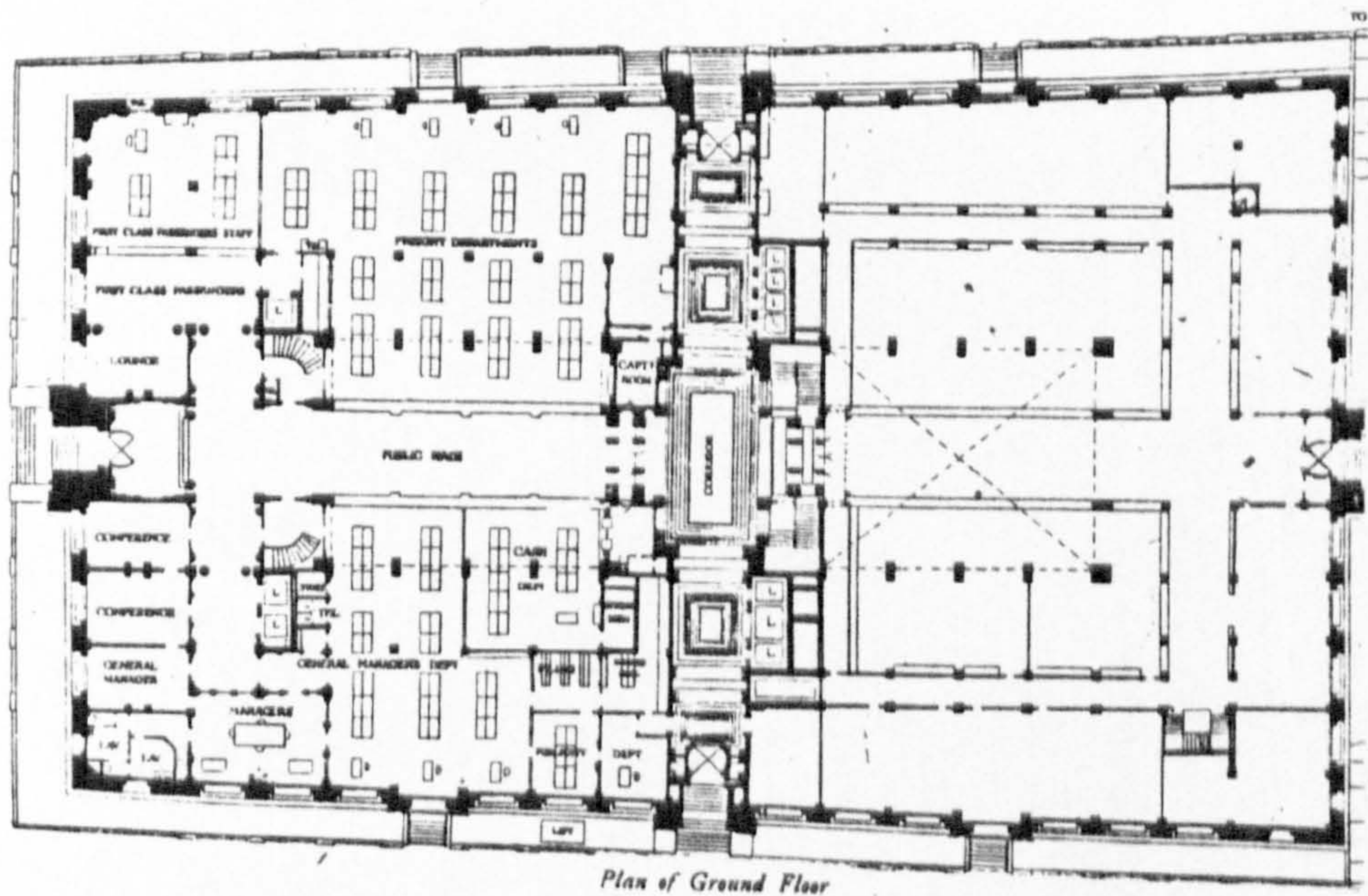


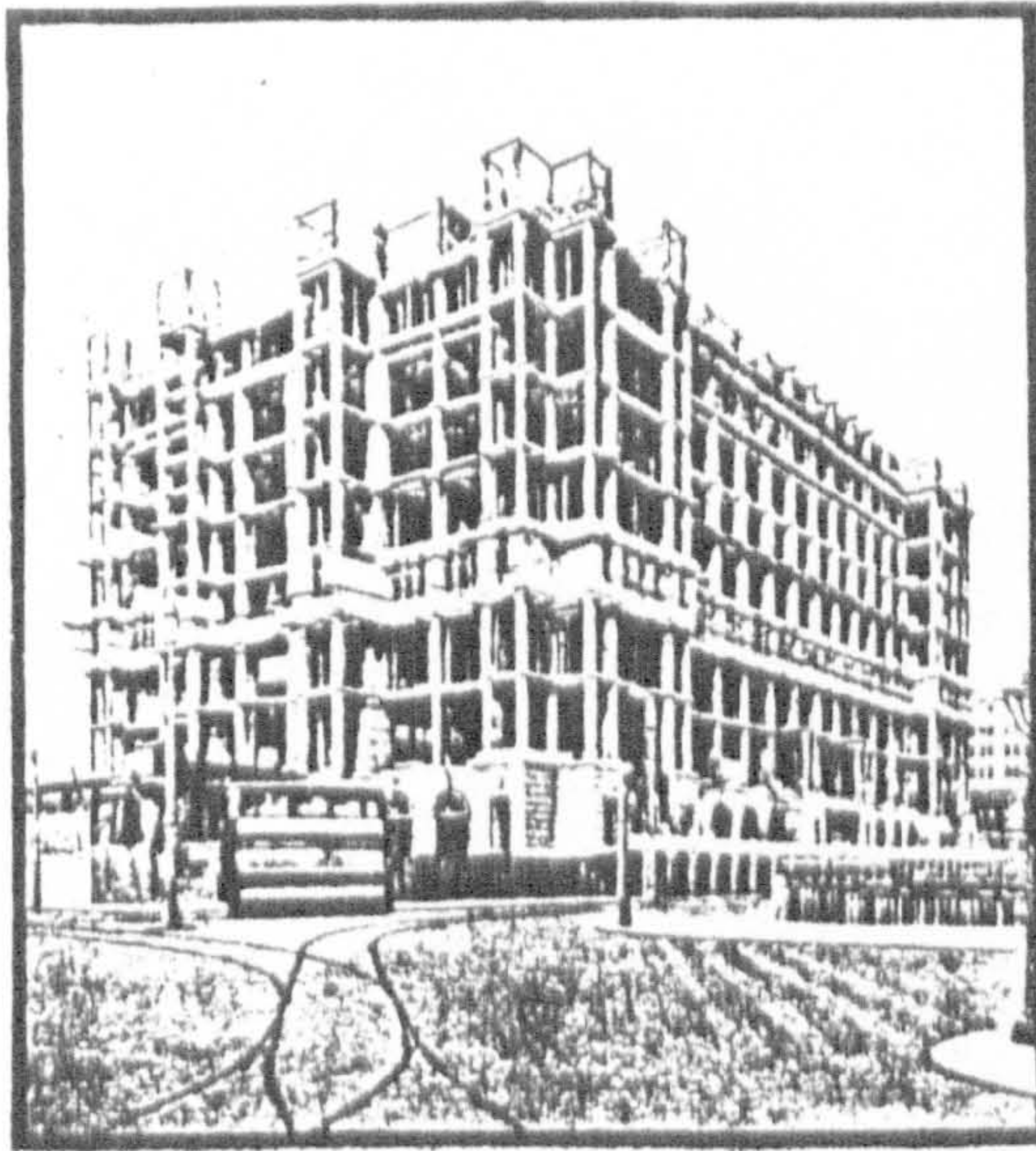
FIRST FLOOR DETAILS OF "LION CHAMBERS," No. 170, HOPE STREET, GLASGOW.

7-21

LYON CHAMBERS, Glasgow, 1906
CUNARD BUILDING, Liverpool, 1916

7-22





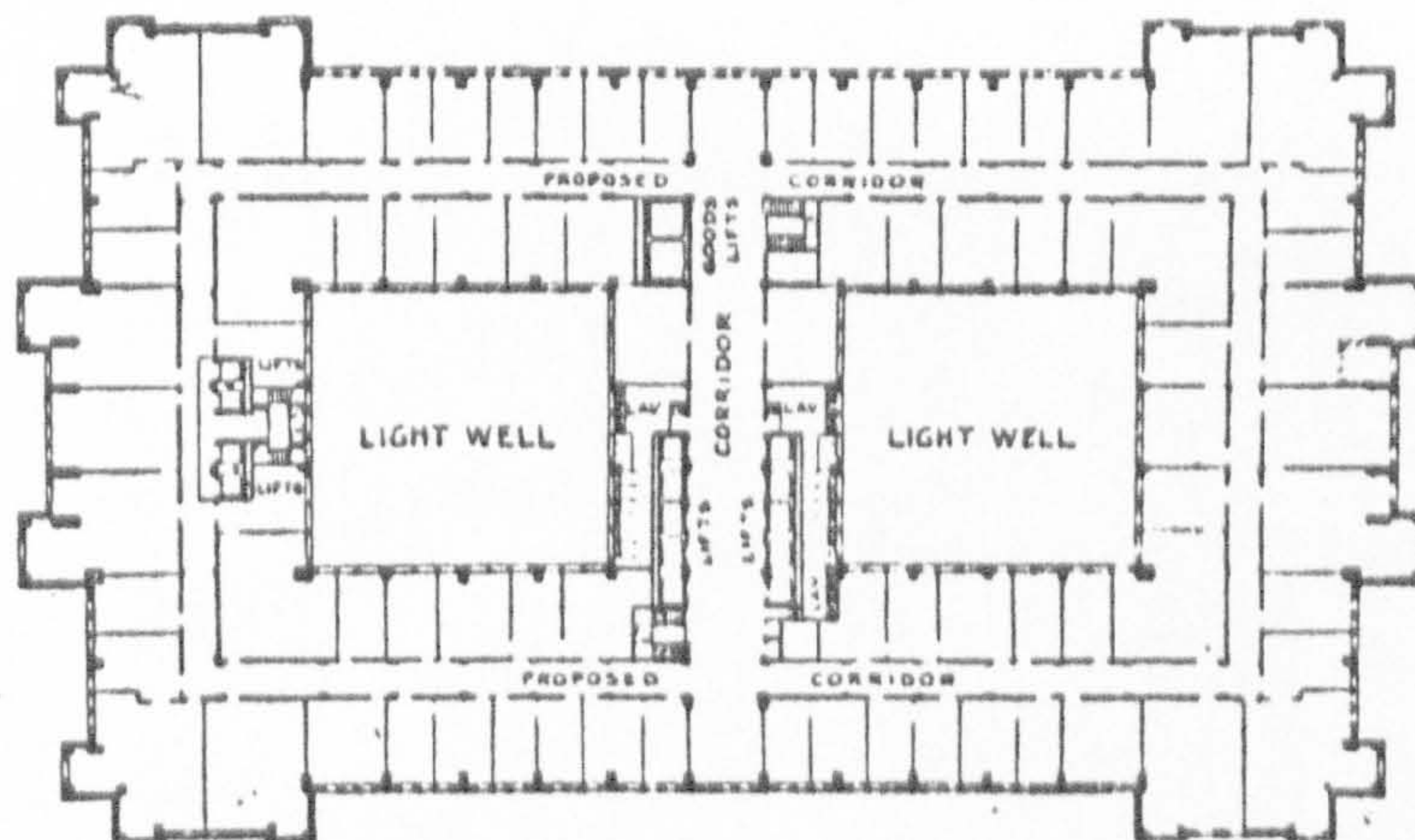
WORKS TO BE FIXING IN PROGRESS.

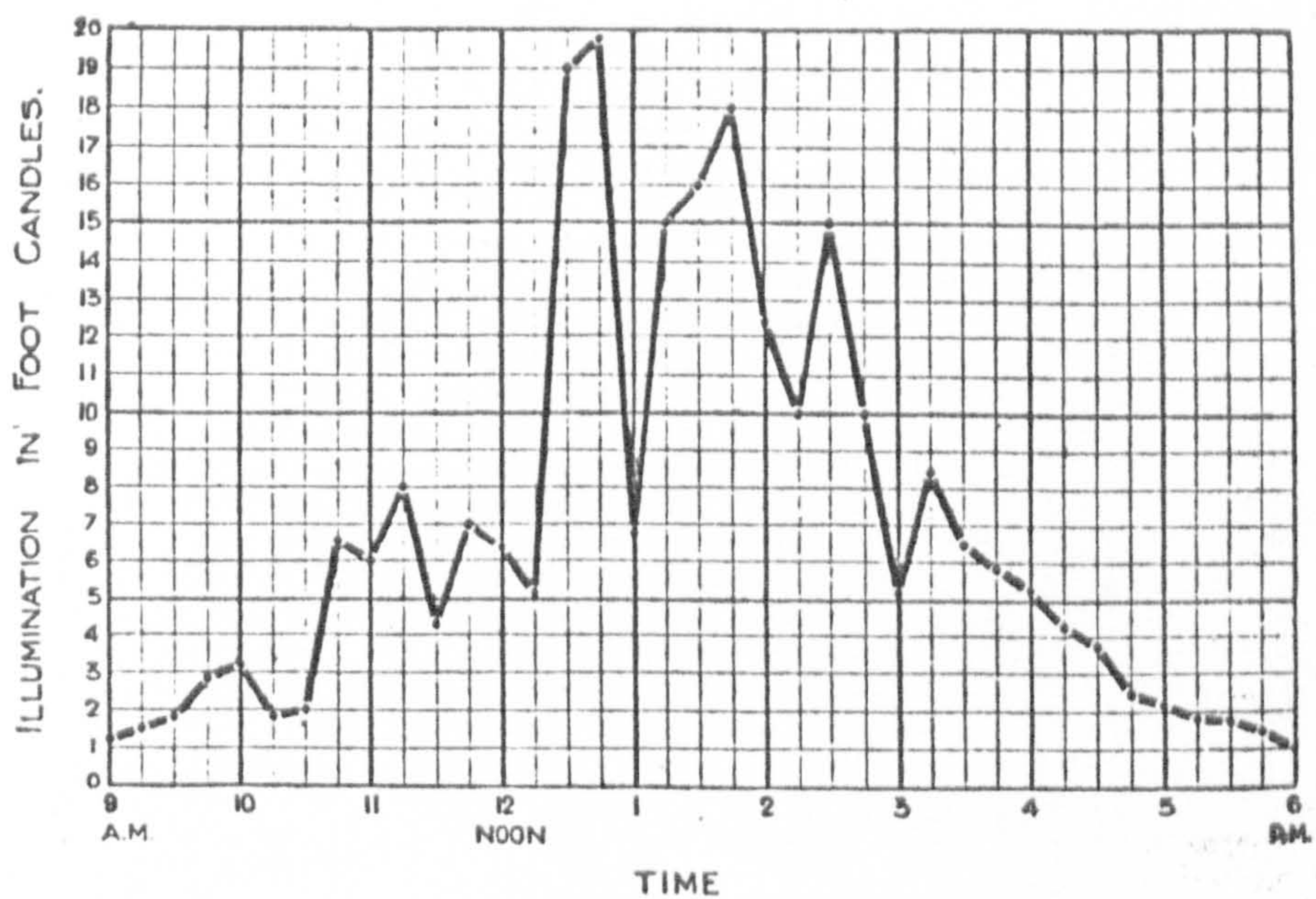
7-23

ROYAL LIVER BUILDING, Liverpool, 1910

ROYAL LIVER BUILDING, Liverpool, 1910

7-24



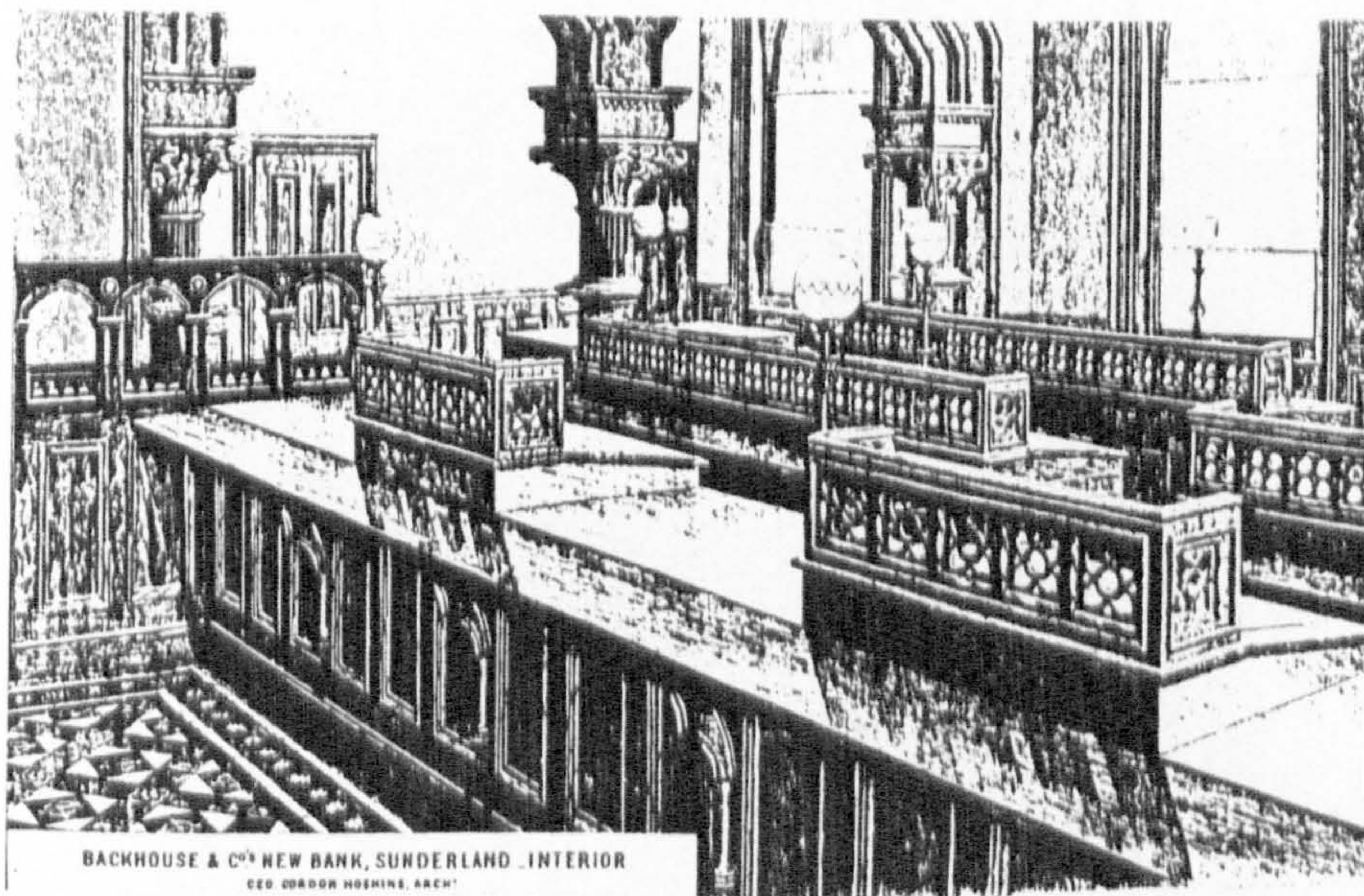


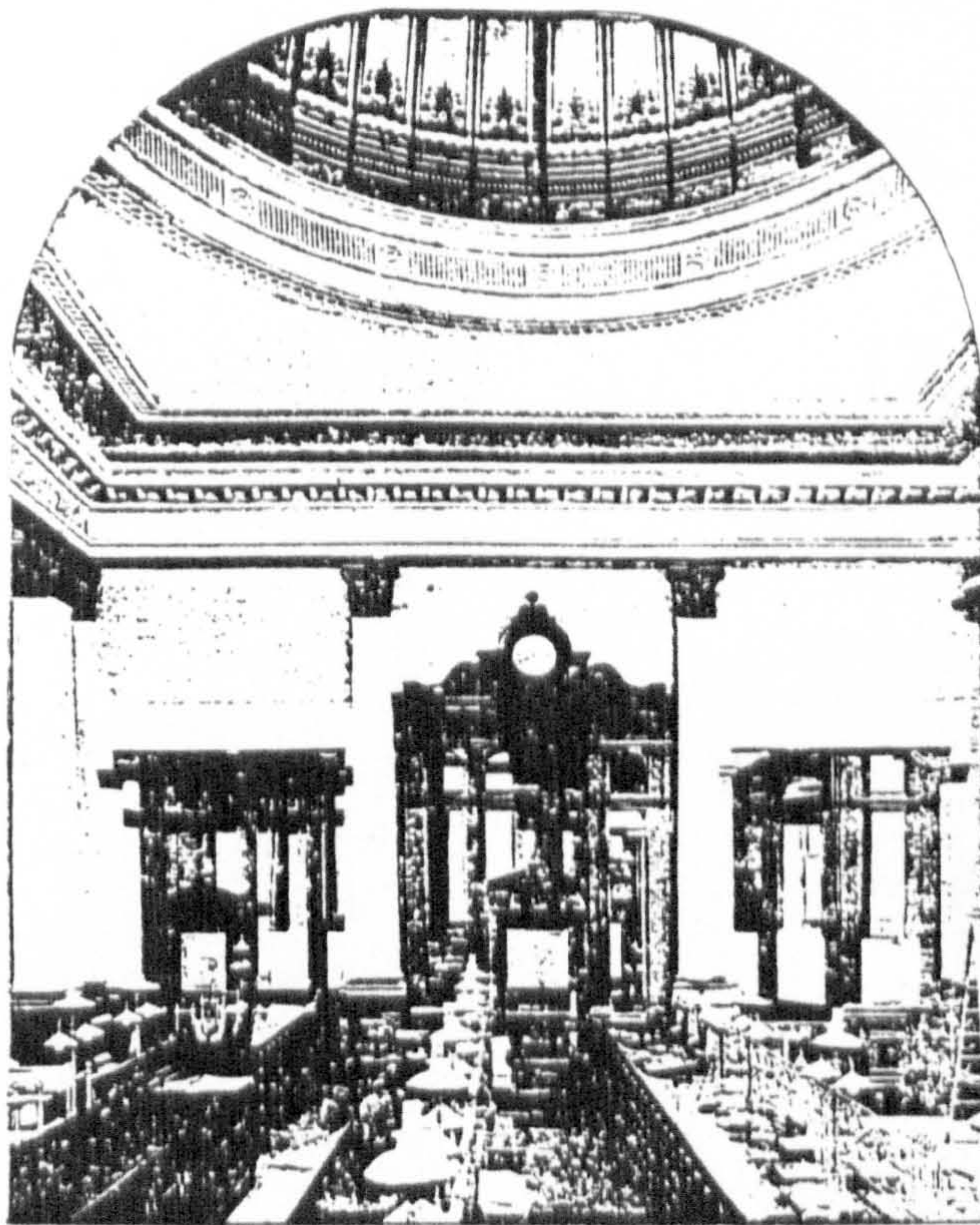
Typical Fluctuations in Daylight Illumination in a London Office (Mr. T. E. Ritchie).

8-1

DAILY LIGHTING FLUCTUATION, 1914
BANK LIGHTING, 1871

8-2



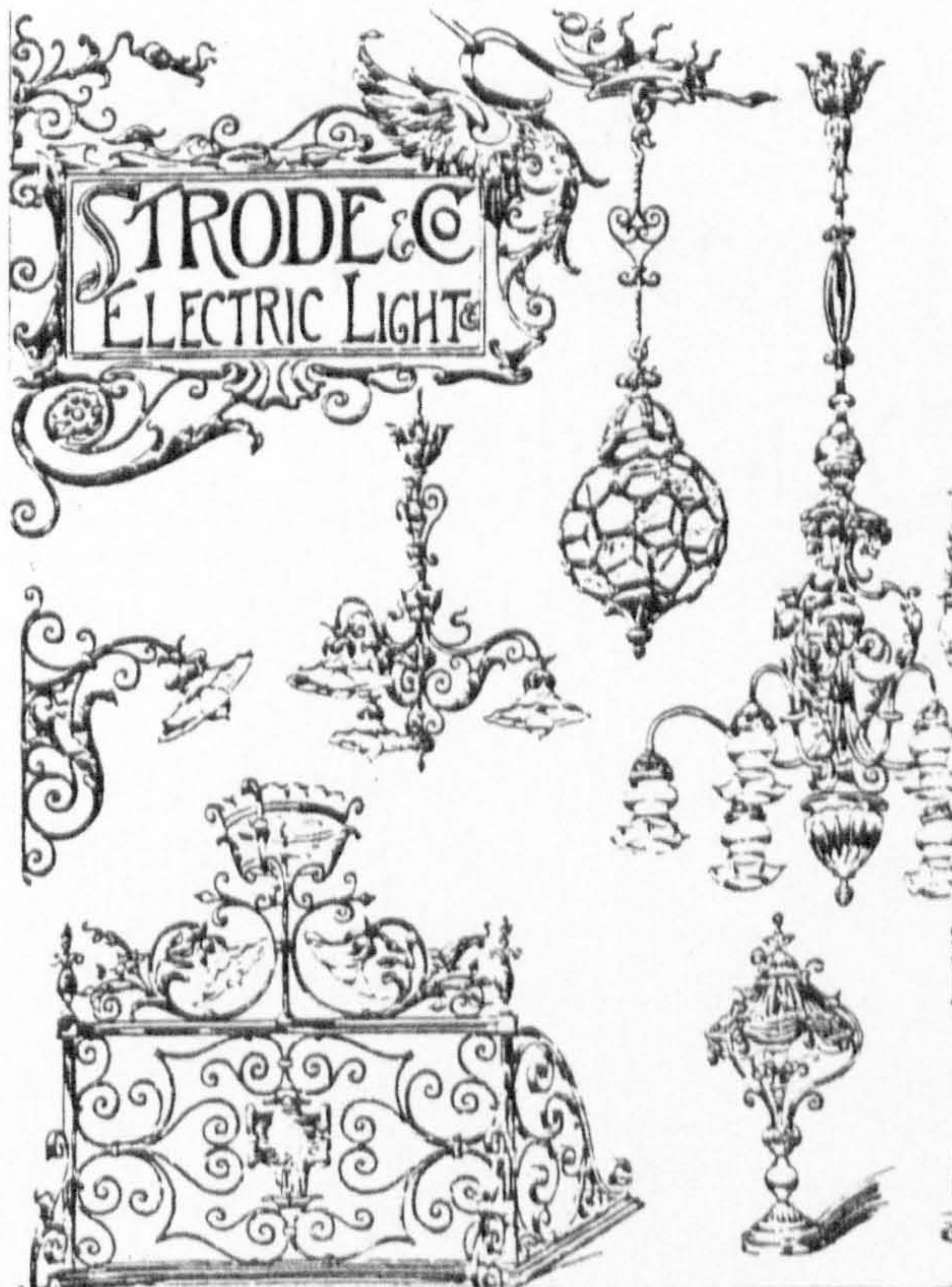


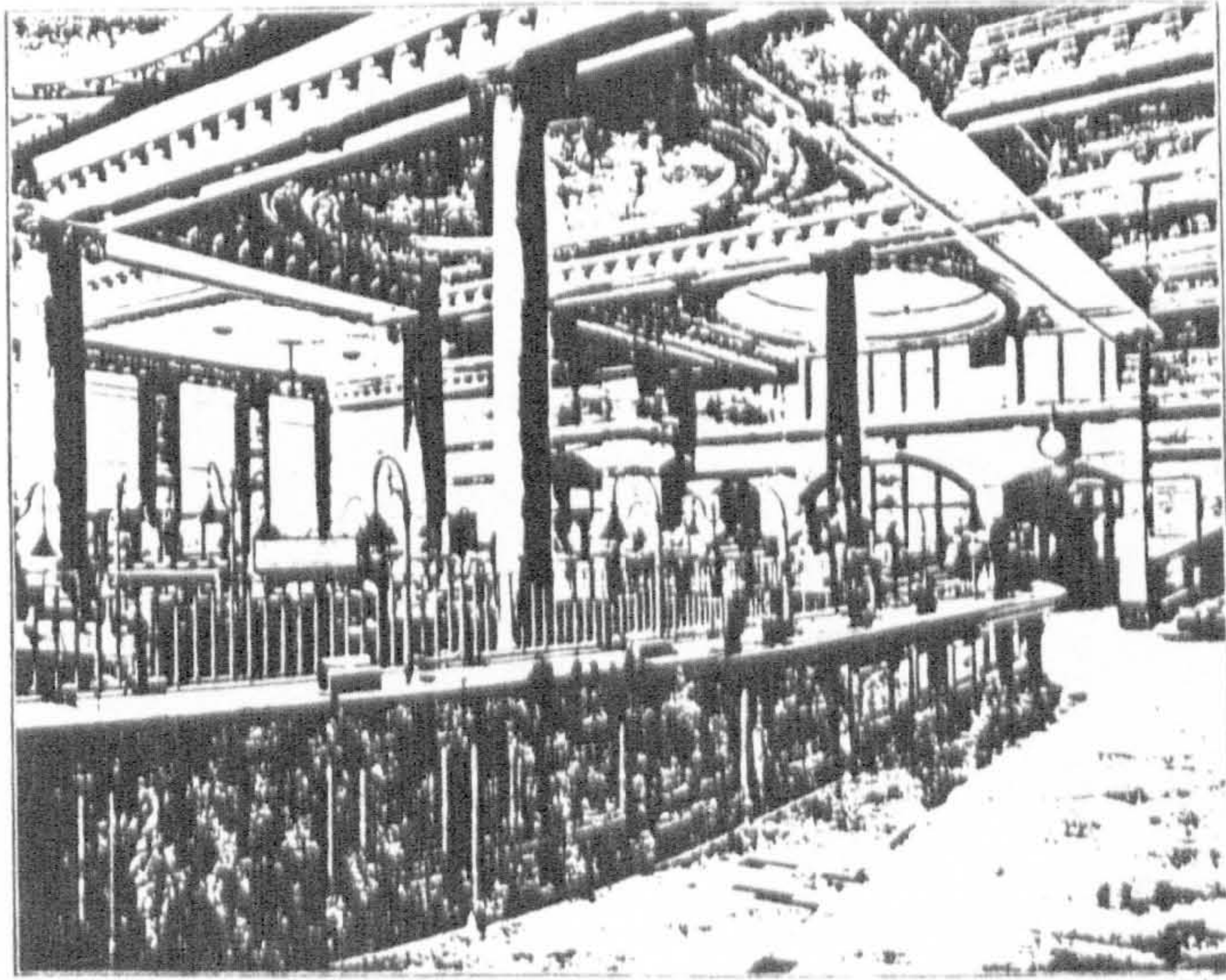
INTERIOR VIEW

8-3

YORKSHIRE BANKING CO., Leeds, 1899
STRODE AND CO. LIGHTING, 1892

8-4



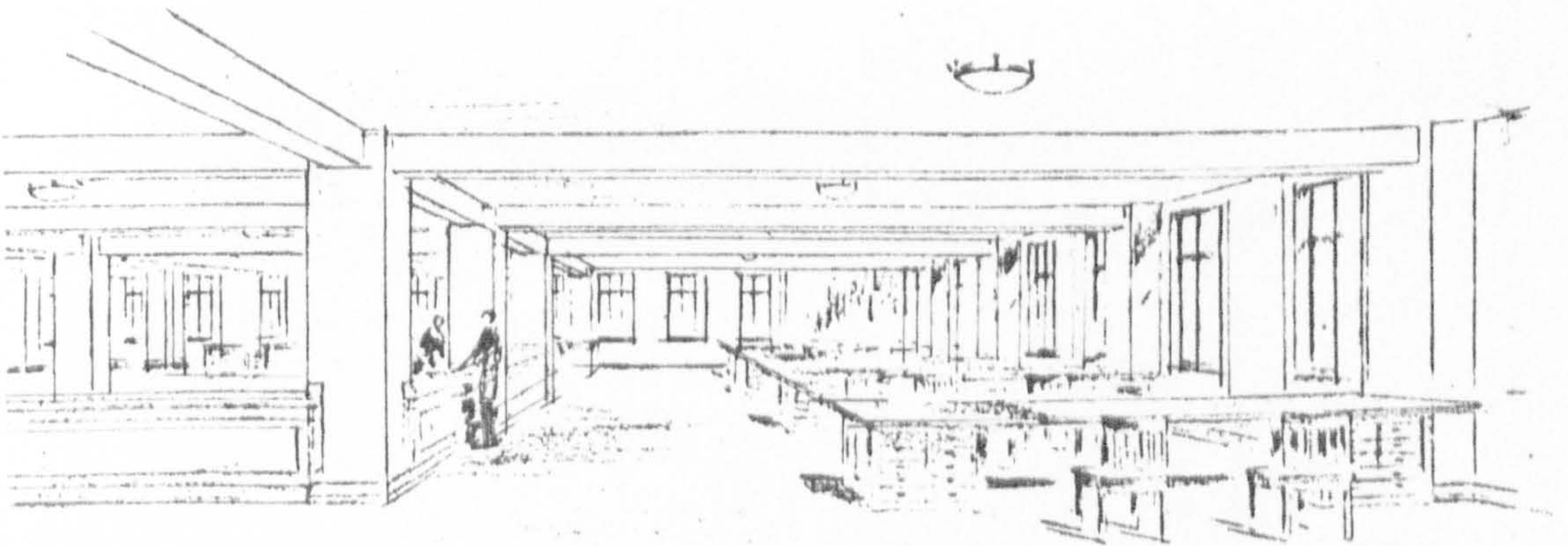


LONDON AND COUNTY BANK LOMBARD STREET LONDON & C. W. CAMPBELL JONES F.R.I.B.A. ARCHITECT.

8-5

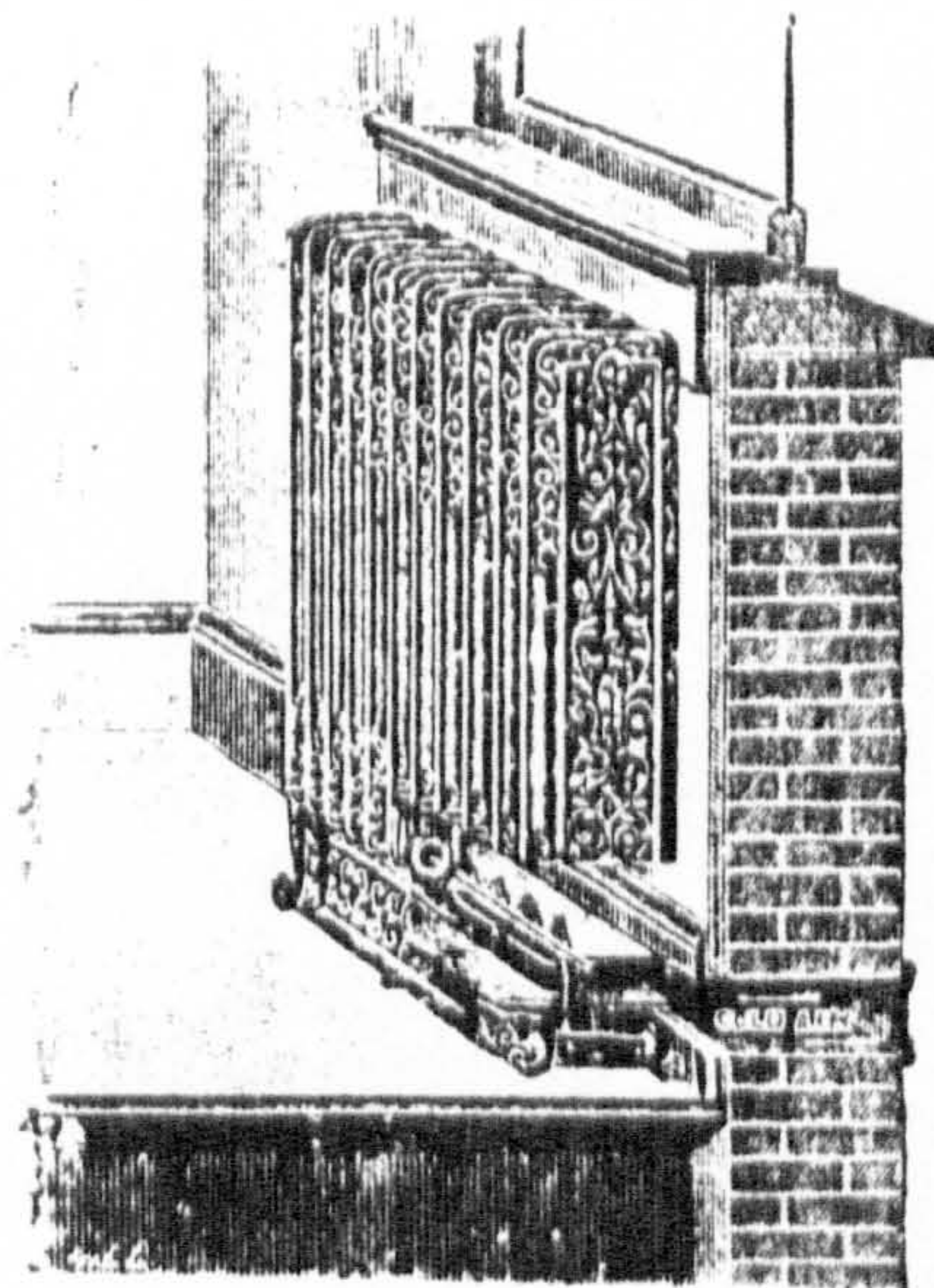
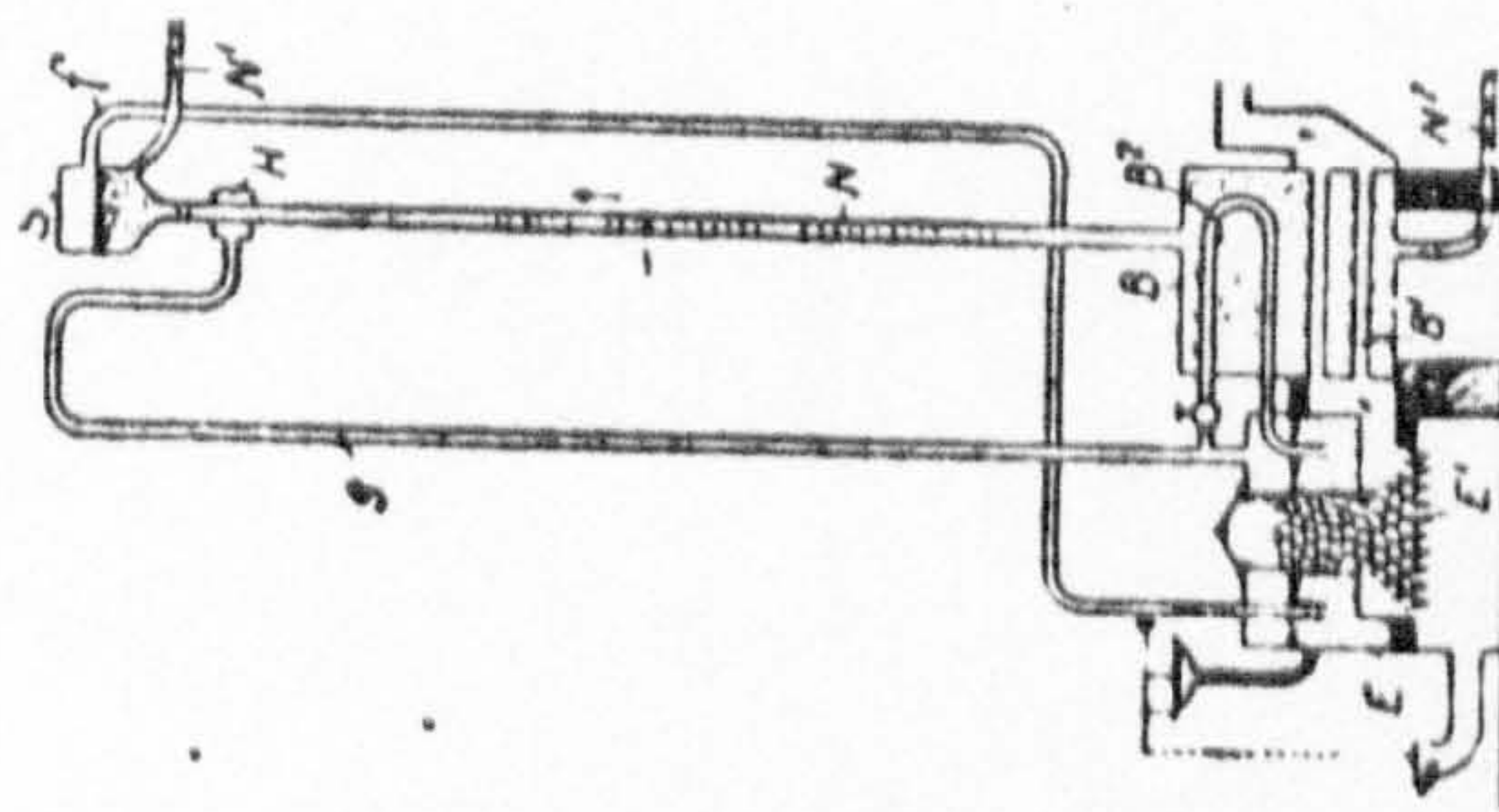
LONDON AND COUNTY BANK LIGHTING, City, 1907
ADELAIDE HOUSE, City, 1921

8-6

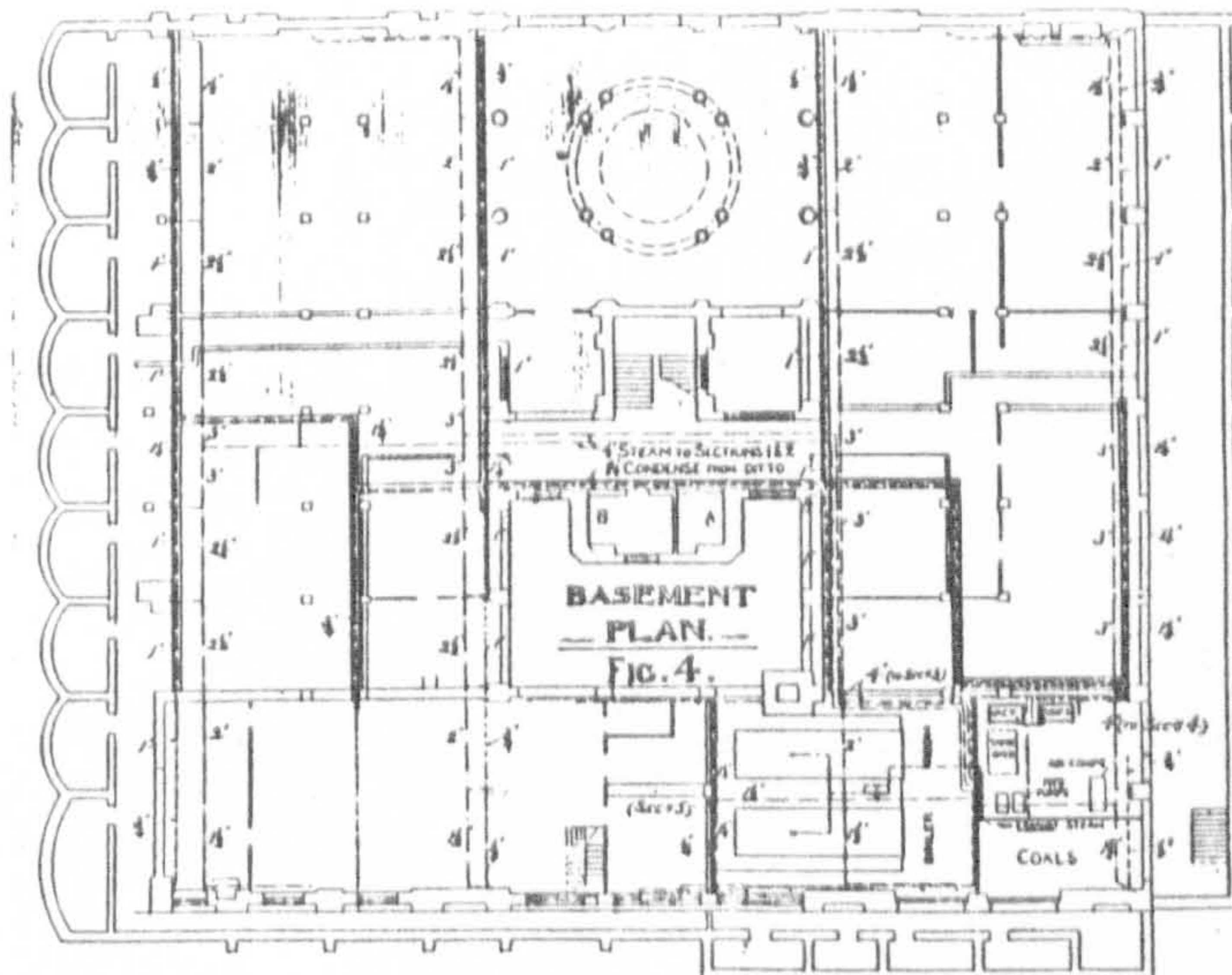


14,473. Heating buildings. RECK
A. B., 155, Gothergade, Copenhagen, Denmark.
July 13.

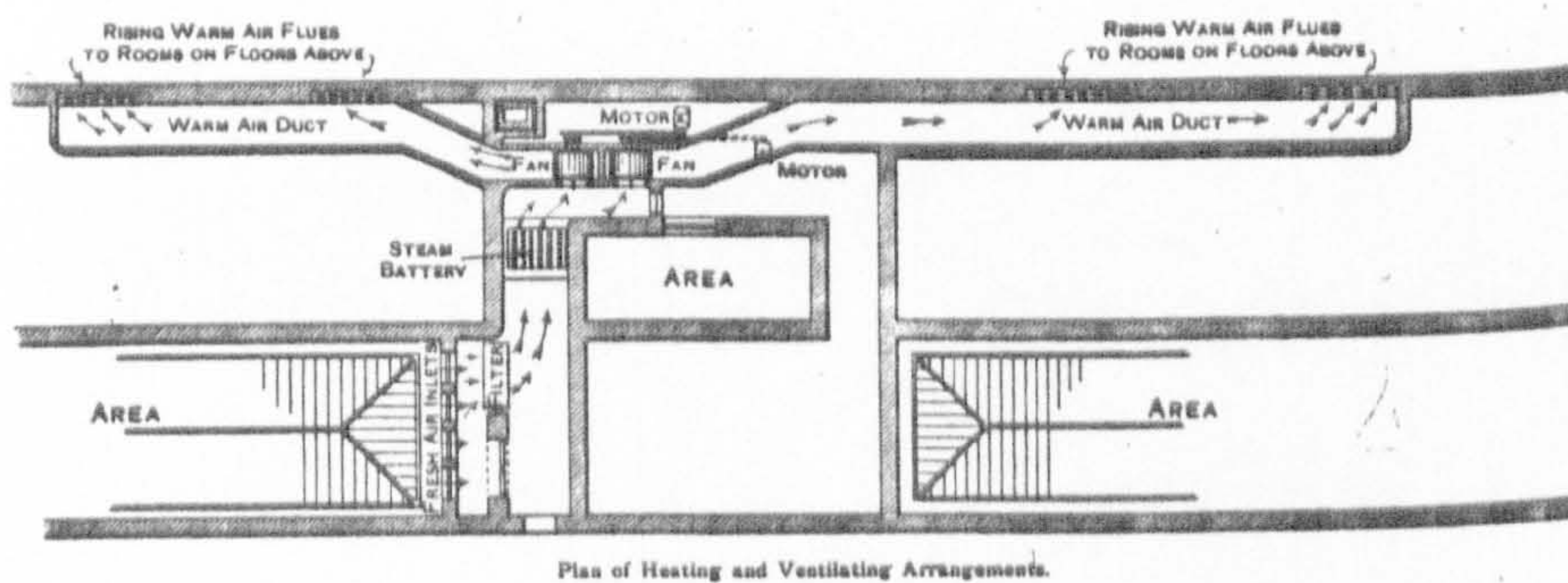
Hot-water apparatus for heating buildings is fitted with an auxiliary appliance for increasing the circulation. The hot-water boiler B is heated by flues B' from the furnace E' and steam pipes B' from the steam boiler E, or by the steam pipes alone. The outward flow pipe N leads to a steam separator S, and the pipe N' leads the hot water to ordinary radiators from whence it returns by the pipe N'. The pipe S leads steam to the heater H, between which and the pipe N there may be a perforated partition. The heater causes steam to be generated in the upper part of the pipe N, and so increases the circulation of the hot water. The steam is condensed in the separator, and returns to the steam boiler through the pipe f.

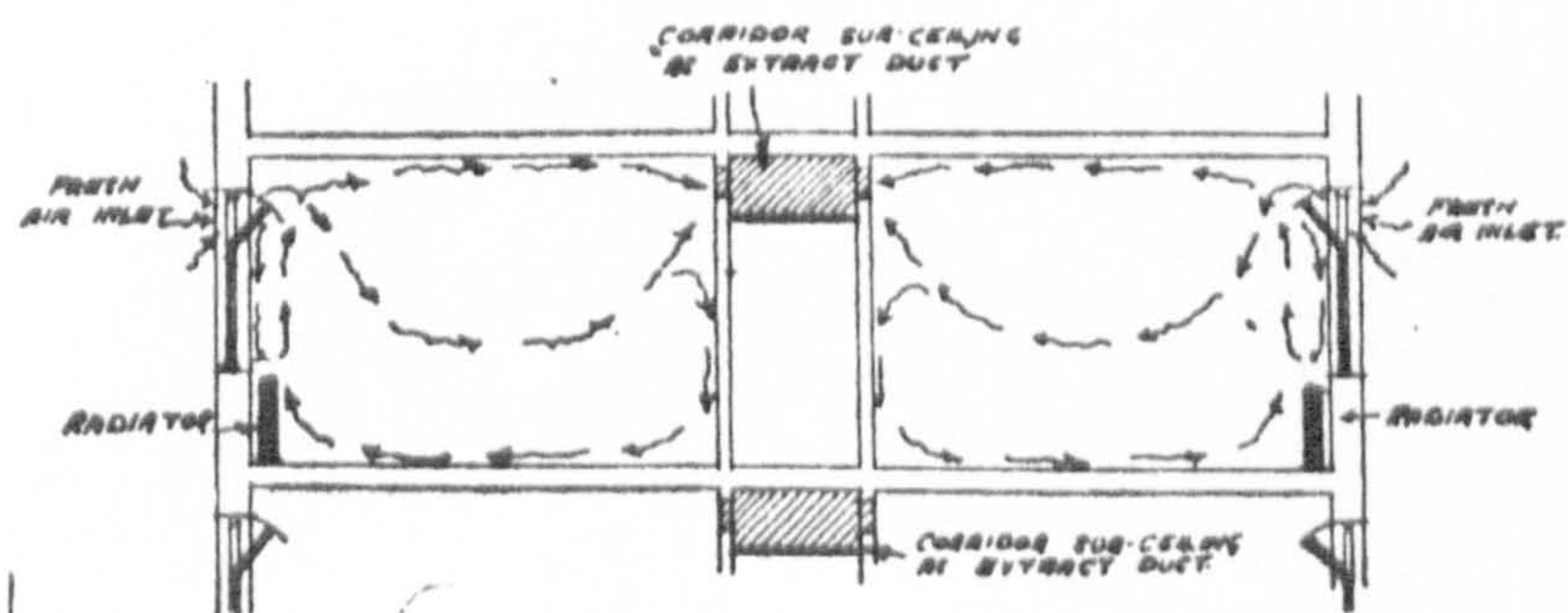


8-7
AMERICAN RADIATOR, 1905
RECK STEAM INJECTION SYSTEM, 1899
8-8

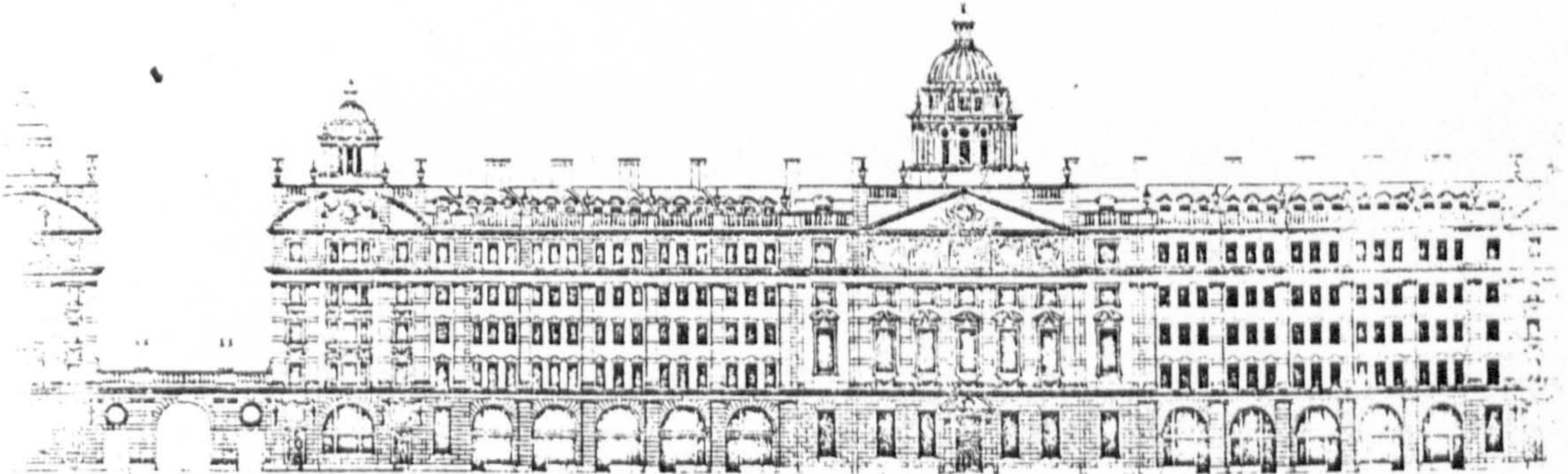


8-9
CAXTON HOUSE, 1909
ELECTRA HOUSE, 1904
8-10





8-11
OFFICE SECTION, 1922



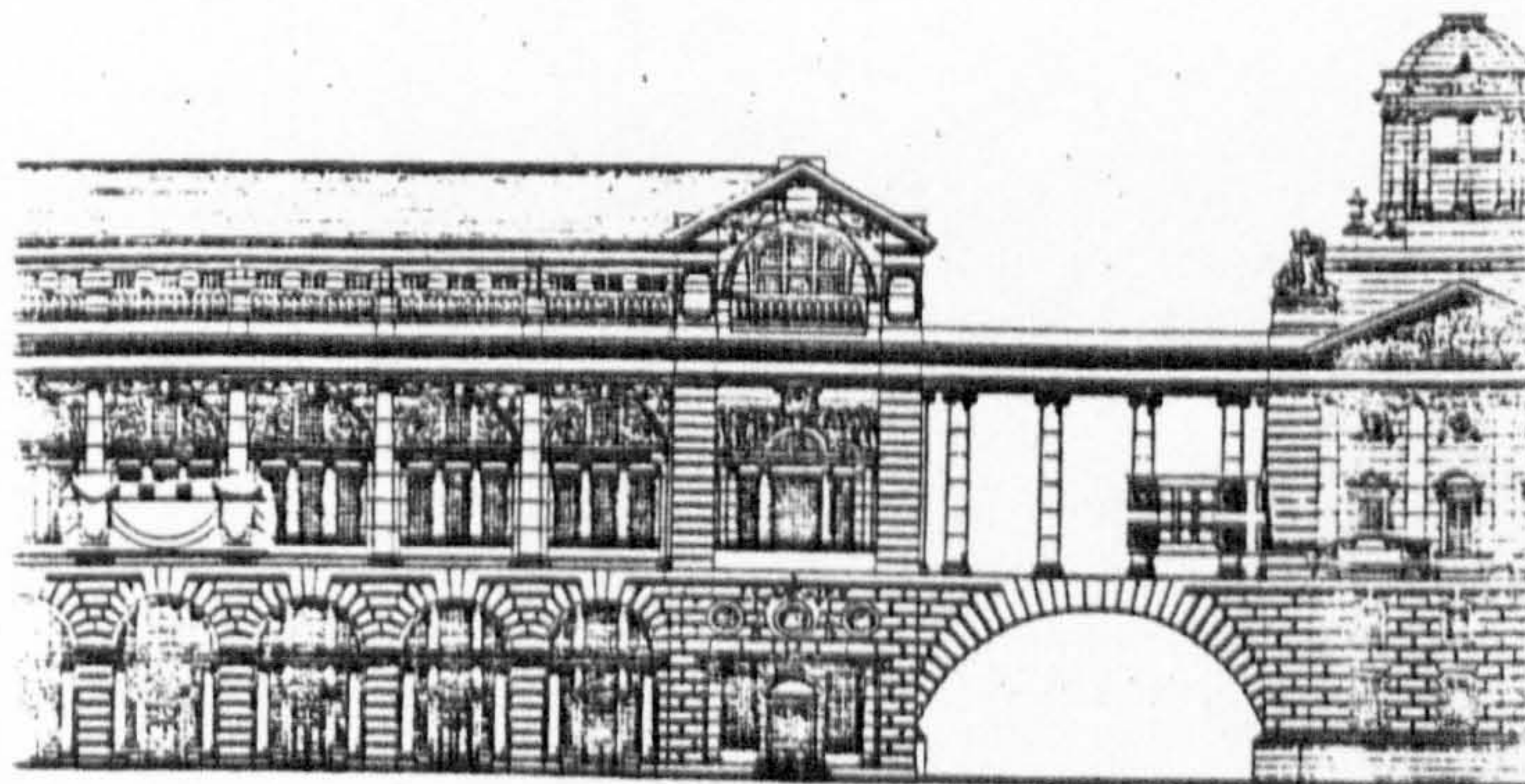
ELEVATION OF THE FRONTAGE NEXT THE STRAND.

9-1

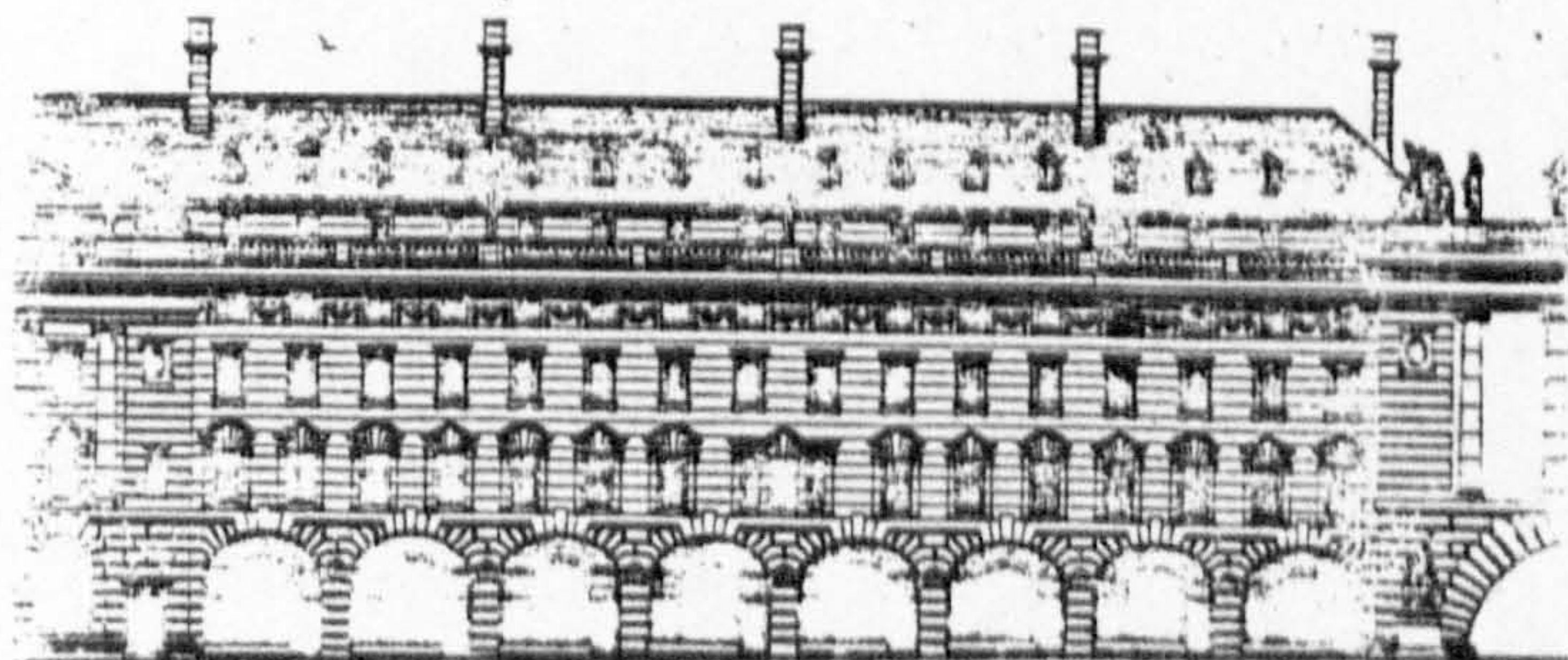
HOLBORN STRAND ENTRY by Blomfield, 1900

HOLBORN STRAND ENTRY by Hare, 1900

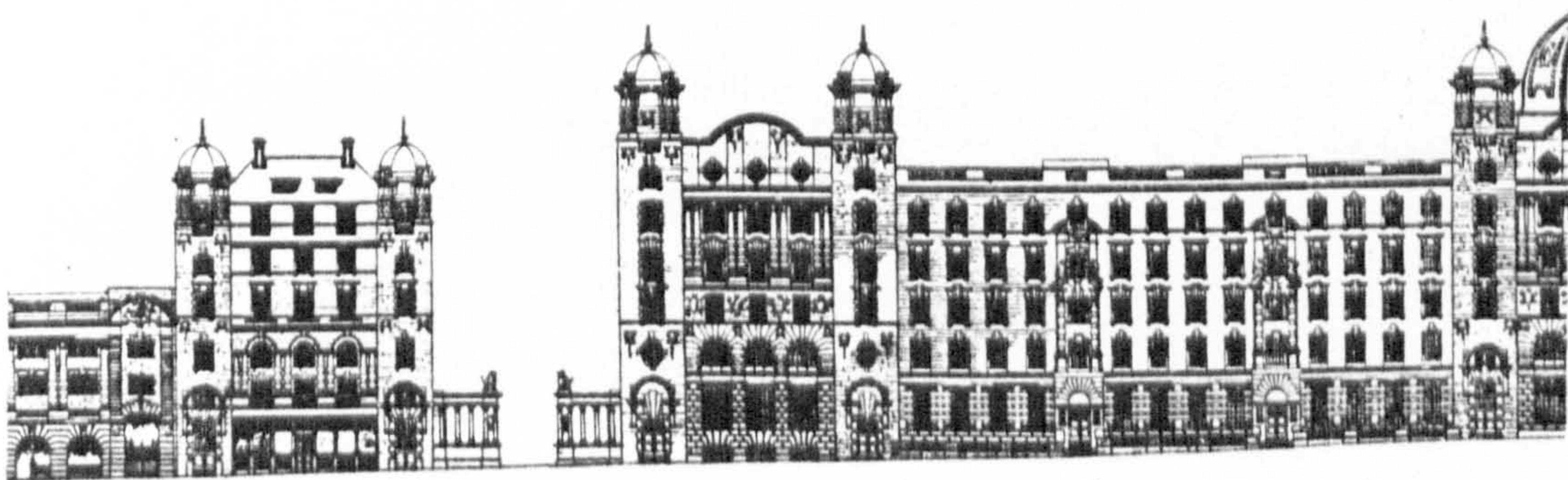
9-2



PART OF STRAND ENTRY.



HALF OF NORTH SIDE OF CECILY STREET.

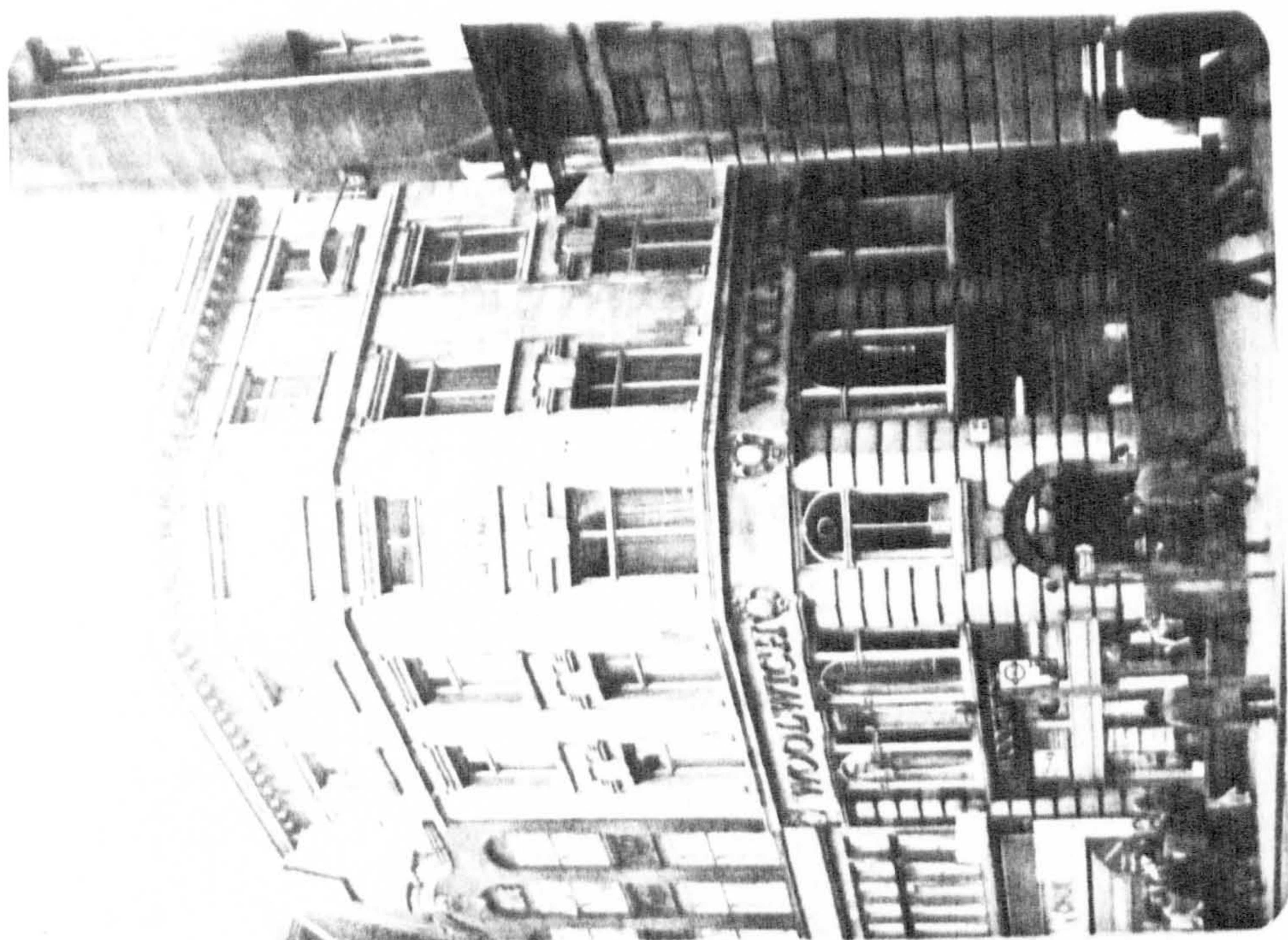


9-3

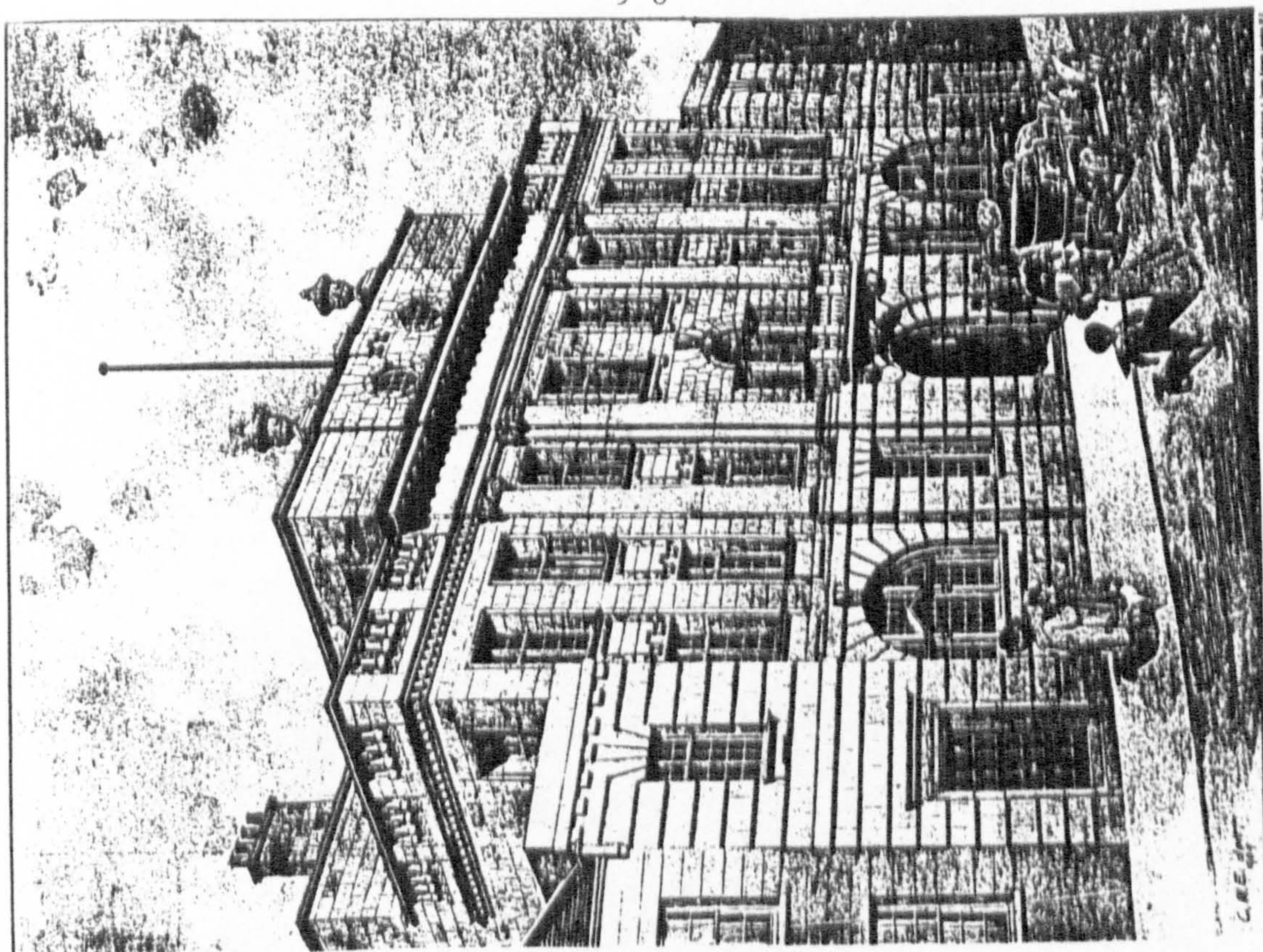
HOLBORN STRAND ENTRY by Runtz, 1900
 LONDON, EDINBURGH AND GLASGOW ASSURANCE CO., Westminster, 1907

9-4



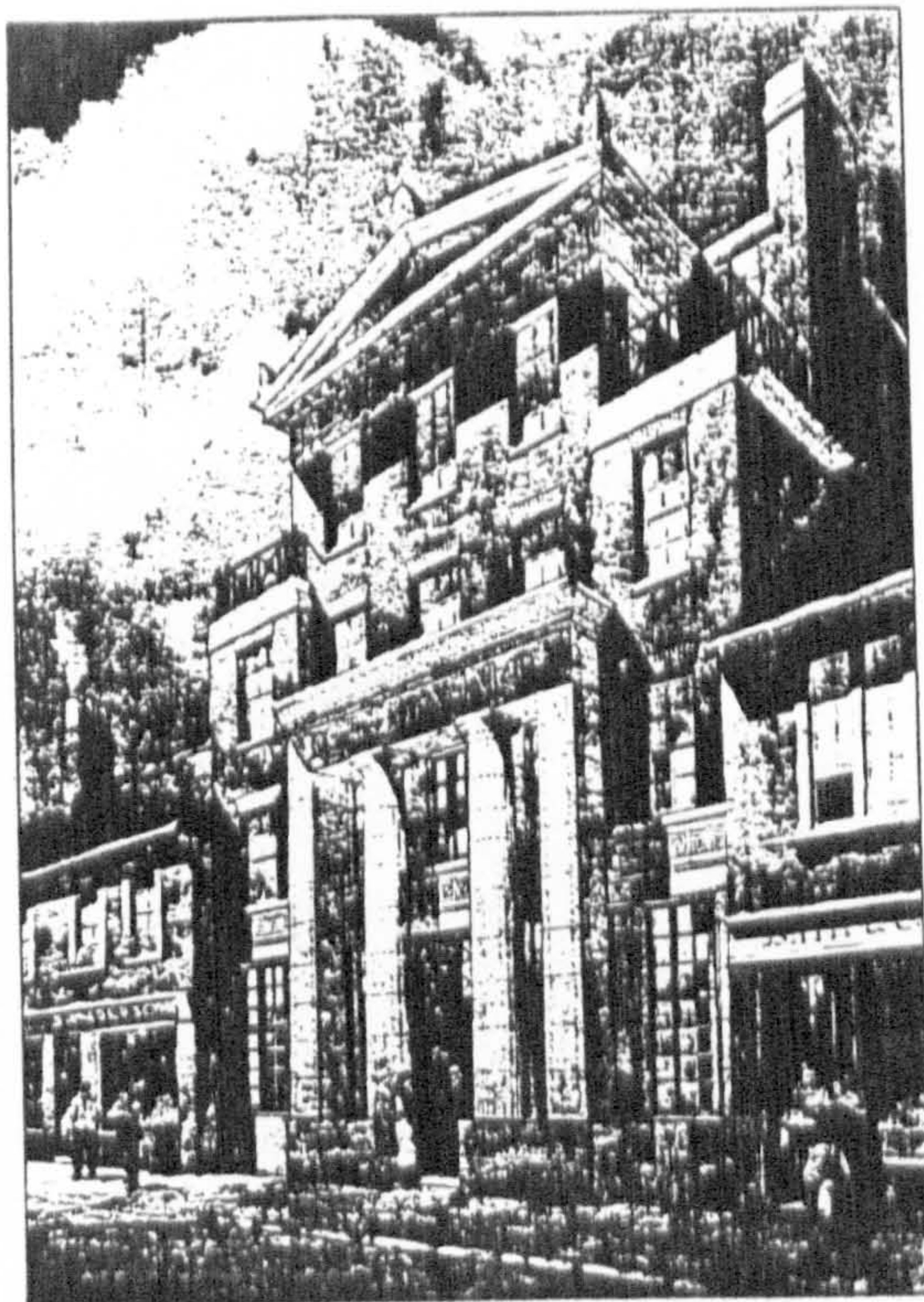


9-5
 BIRMINGHAM DAILY POST, City, 1904
 PRUDENTIAL ASSURANCE CO., Aberdeen, 1909
 9-6



PRUDENTIAL ASSURANCE COMPANY'S OFFICE ABERDEEN
 PAUL WATERHOUSE ARCHT

C. R. E. 1909
 PAUL WATERHOUSE ARCHT



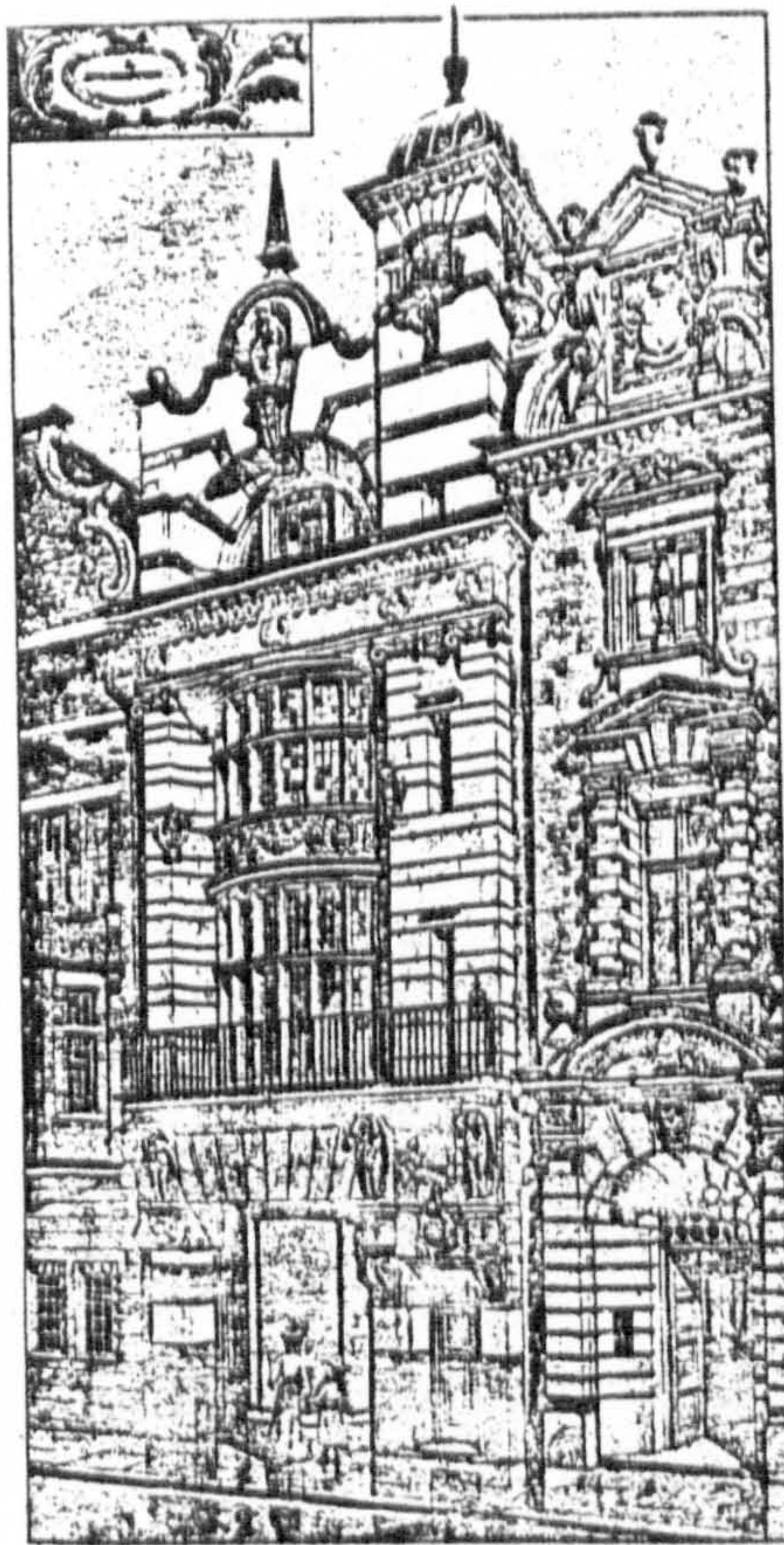
STUDY FOR A DISTRICT OFFICE - MR. PAUL WATERHOUSE, ARCHITECT

9-7

PRUDENTIAL ASSURANCE CO., Design Study, 1917
 ECONOMIC ASSURANCE OFFICE AND PARR'S BANK, Manchester, 1902

9-8



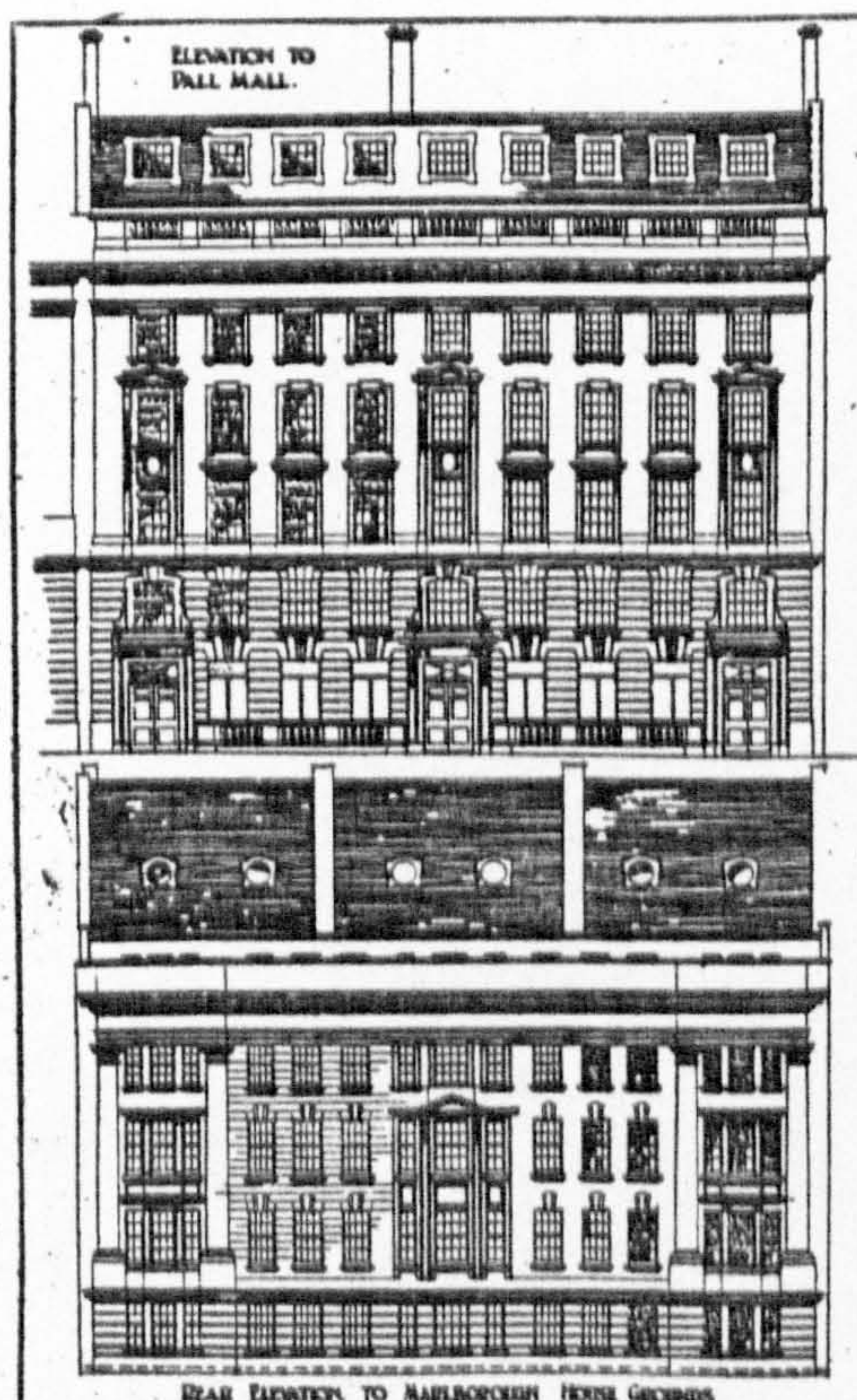


COMMERCIAL CHAMBERS, NORWICH.

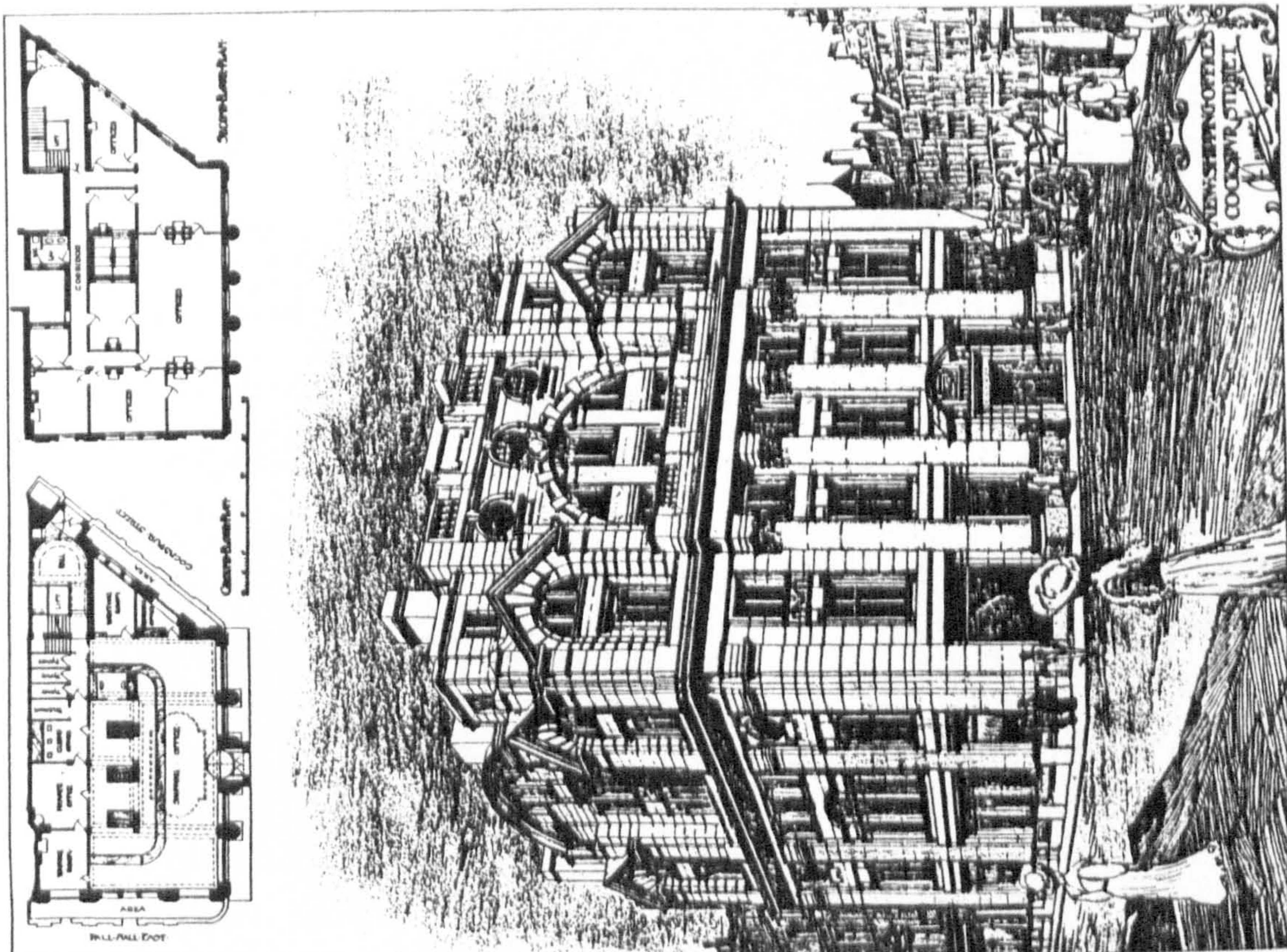
9-9

COMMERCIAL CHAMBERS, Norwich, 1904
 PALL MALL OFFICE BUILDING, Westminster, 1912

9-10



PREMIERS NOW BUILDING IN PALL MALL, S.W.—Messrs. Henry Mortimer and T. H. Goss, Architects.



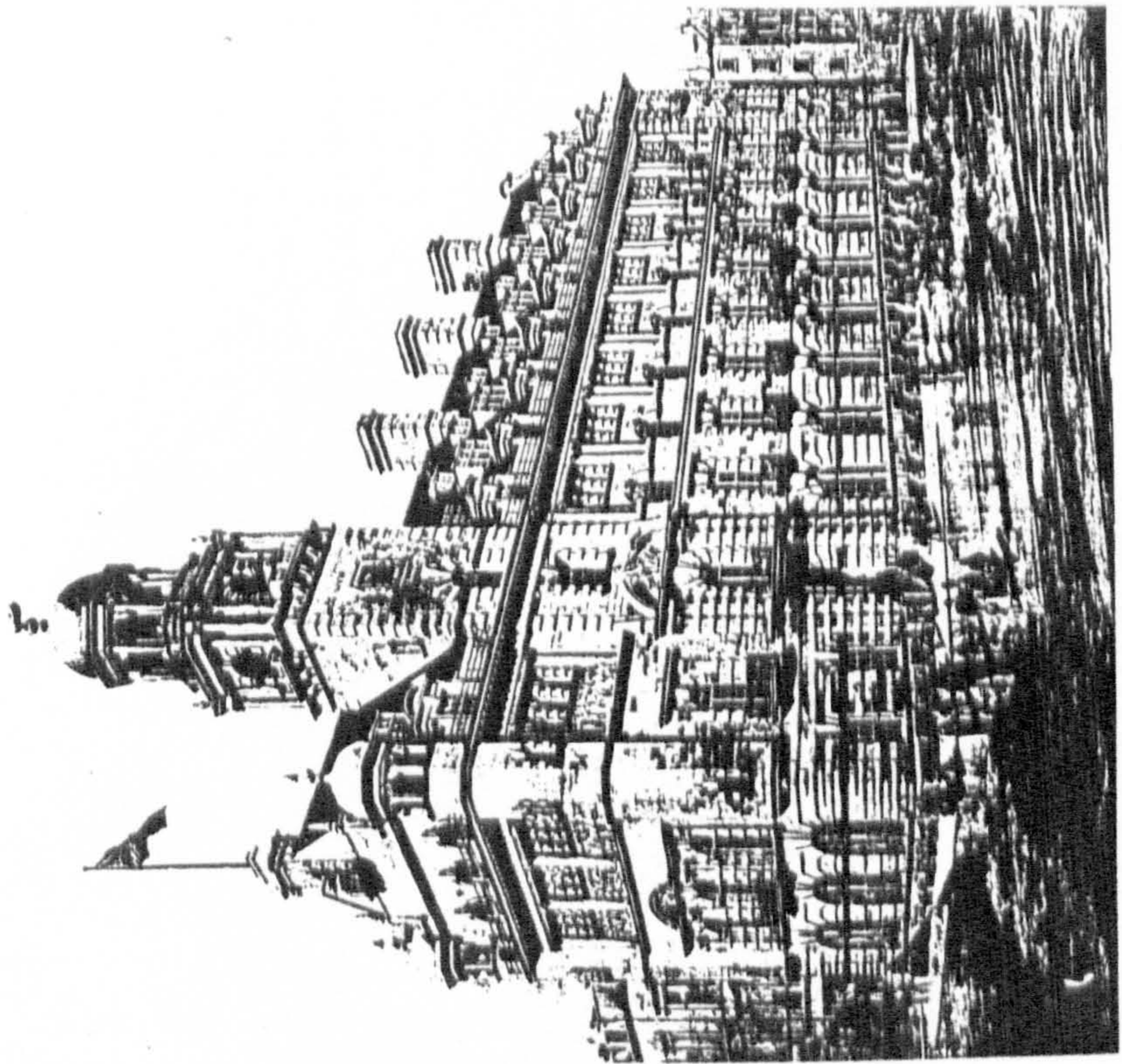
9-11

SHIPPING OFFICES, Westminster, 1905

NORTH BRITISH AND MERCANTILE INSURANCE CO., Westminster, 1911

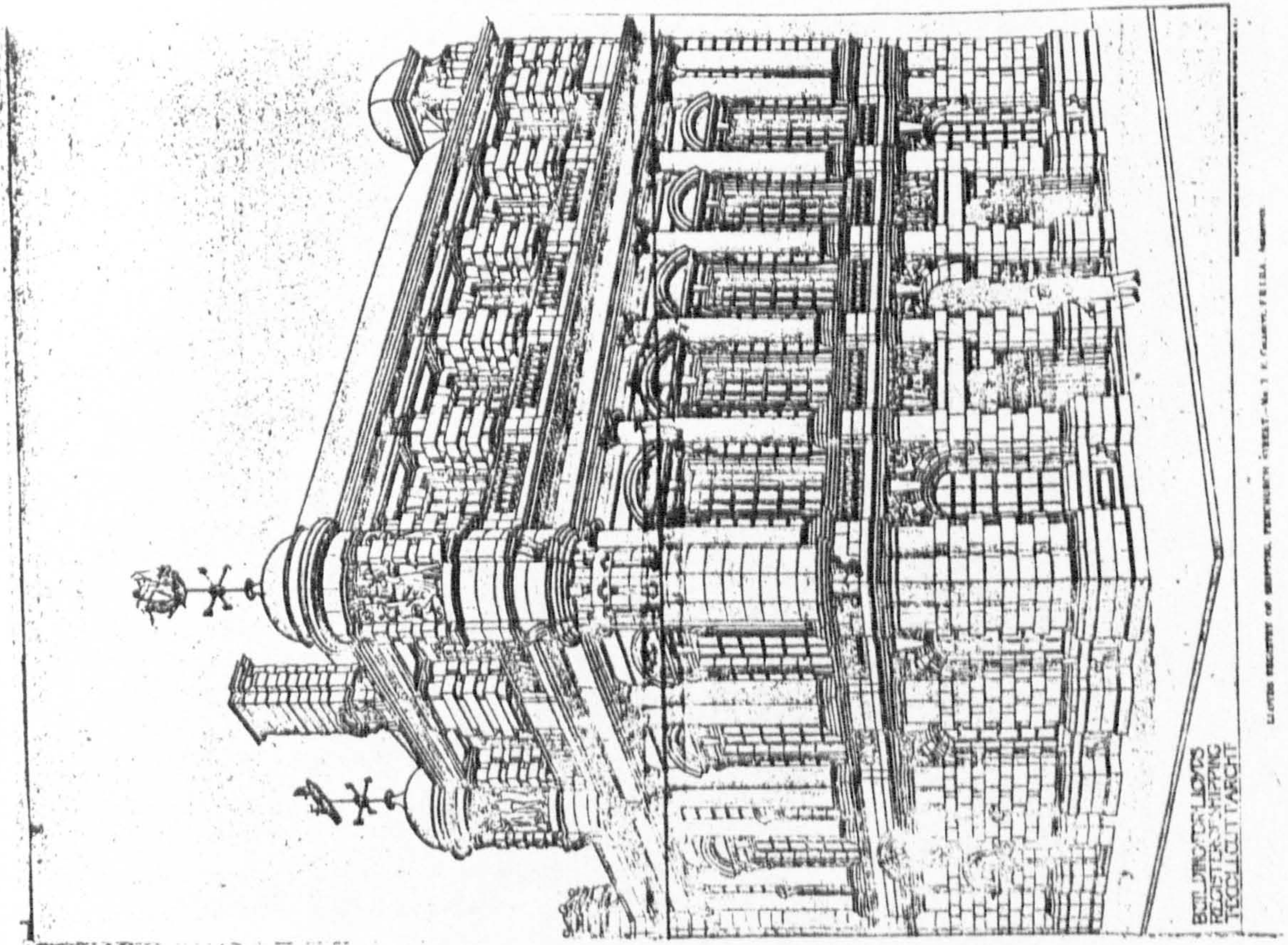
9-12





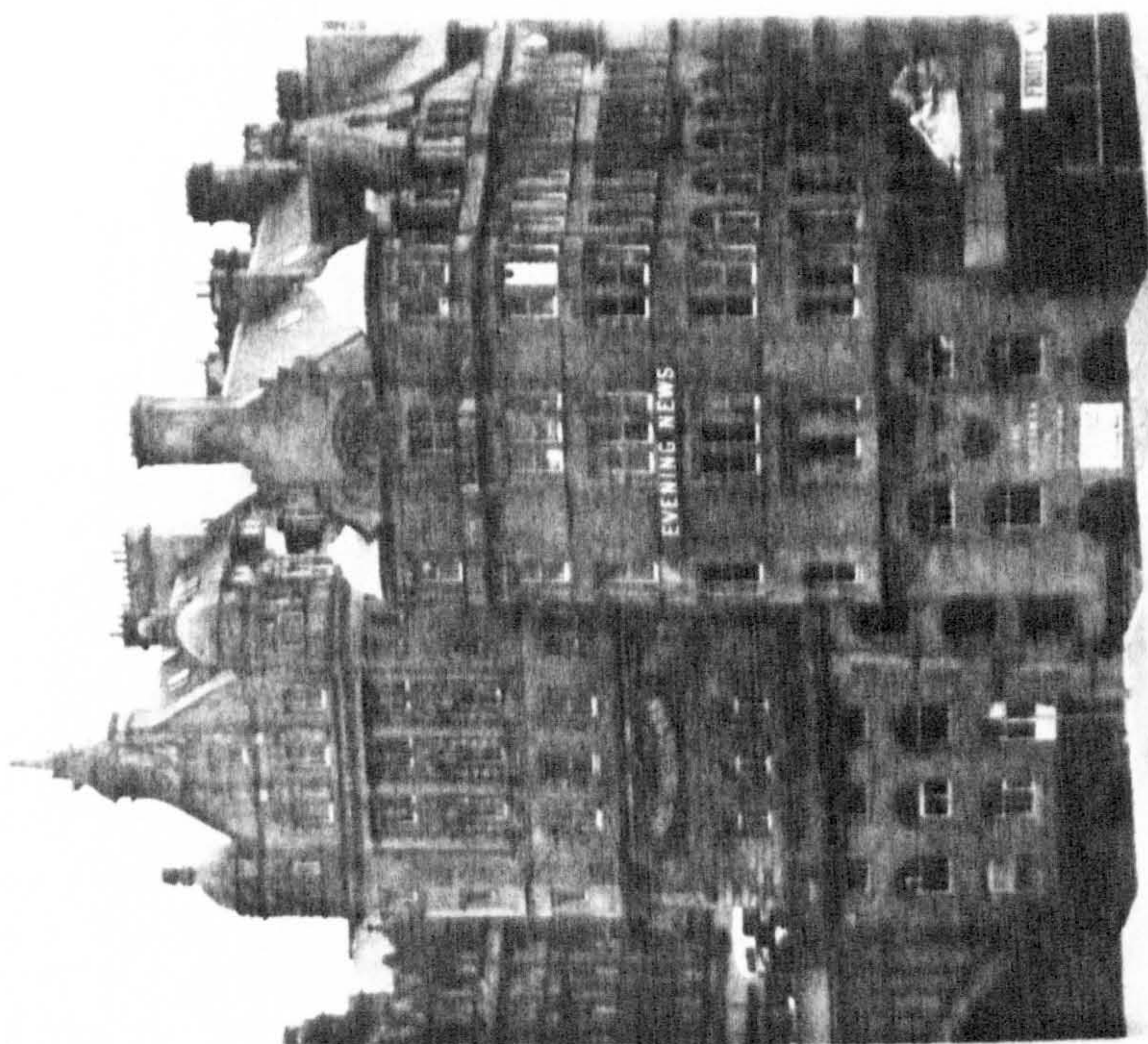
PERSPECTIVE VIEW OF THE DALE STREET & NORTH JOHN STREET FRONTS.

9-13
ROYAL INSURANCE BUILDING, Liverpool, 1896
LLOYDS REGISTRY OF SHIPPING, City, 1901
9-14



BUILDING FOR LLOYD'S
REGISTRY OF SHIPPING
TECHNICAL ARCHT

LLOYD'S REGISTRY OF SHIPPING, FENWICK STREET, No. 1 & 2, LONDON, E.C. 4.

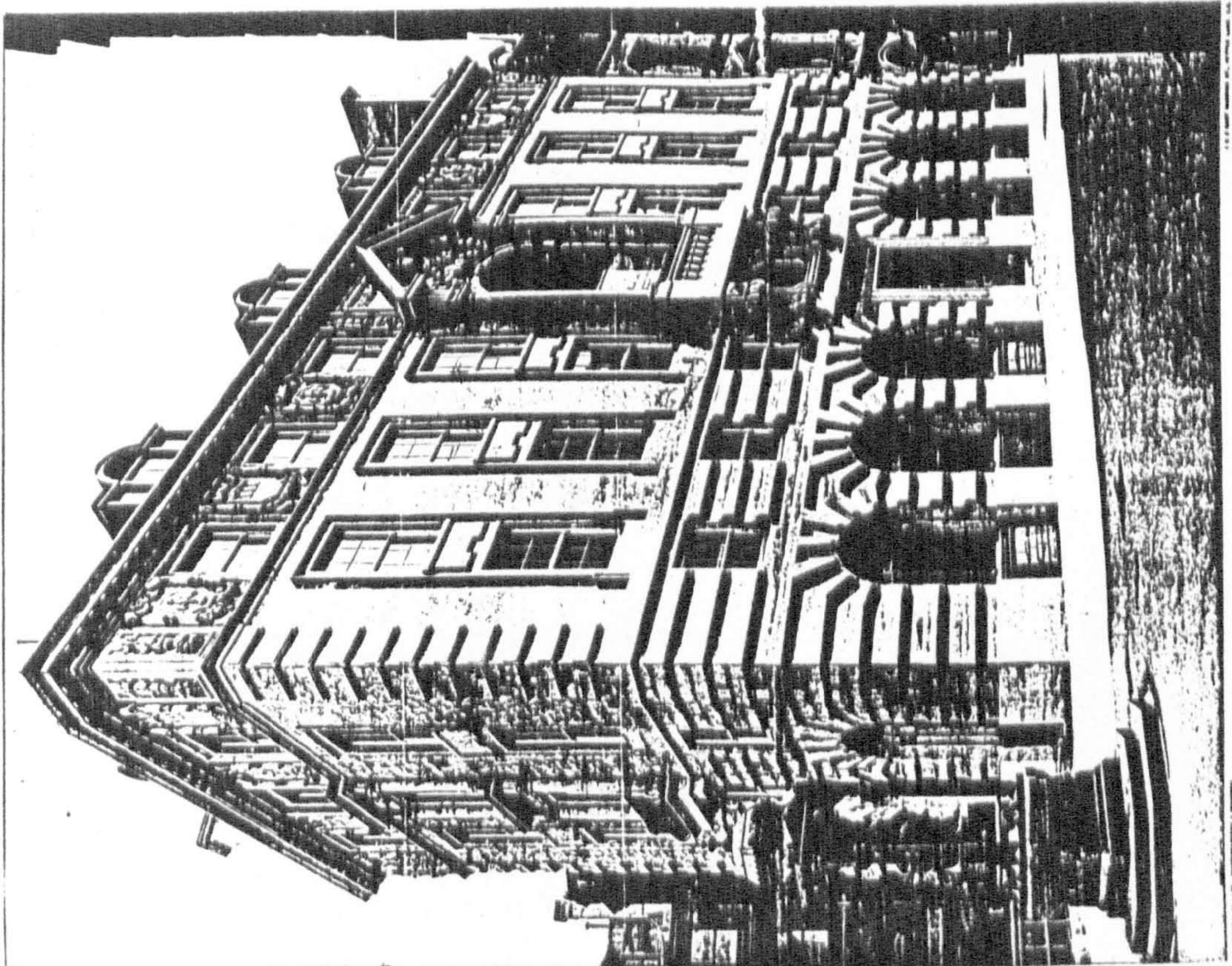


9-15

SCOTSMAN BUILDING, Edinburgh, 1902
ALLIANCE ASSURANCE OFFICE, Westminster, 1904

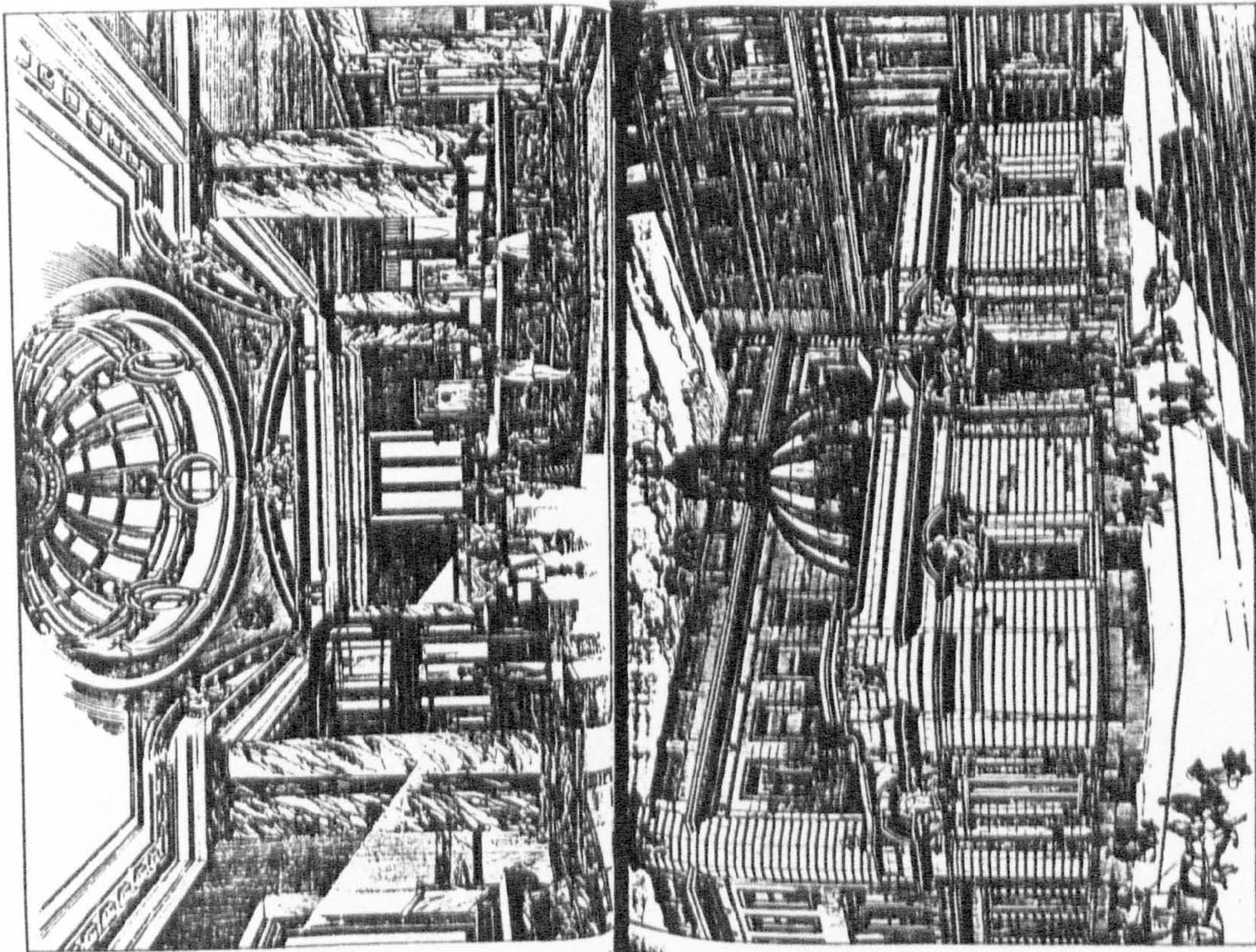
9-16

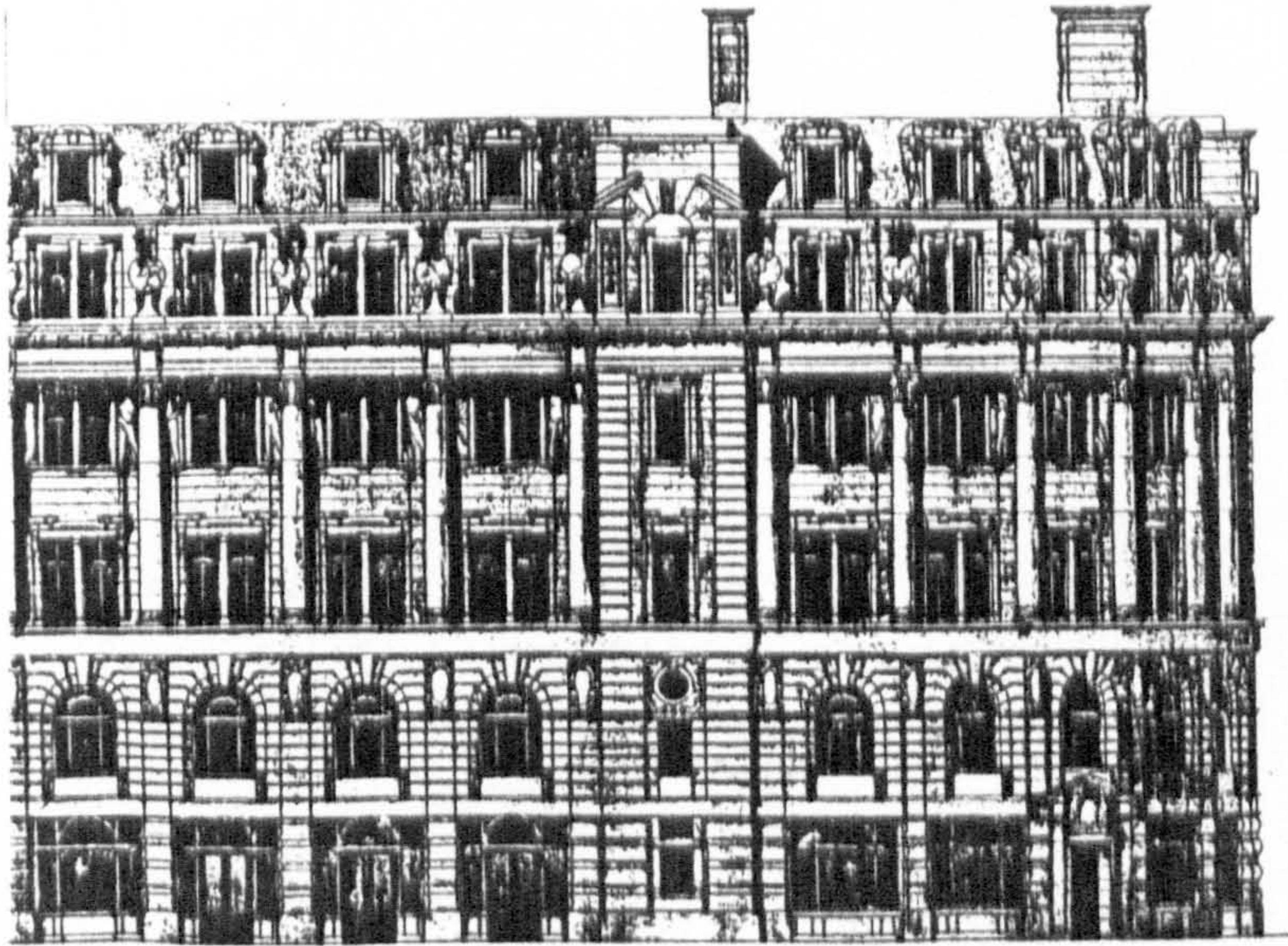




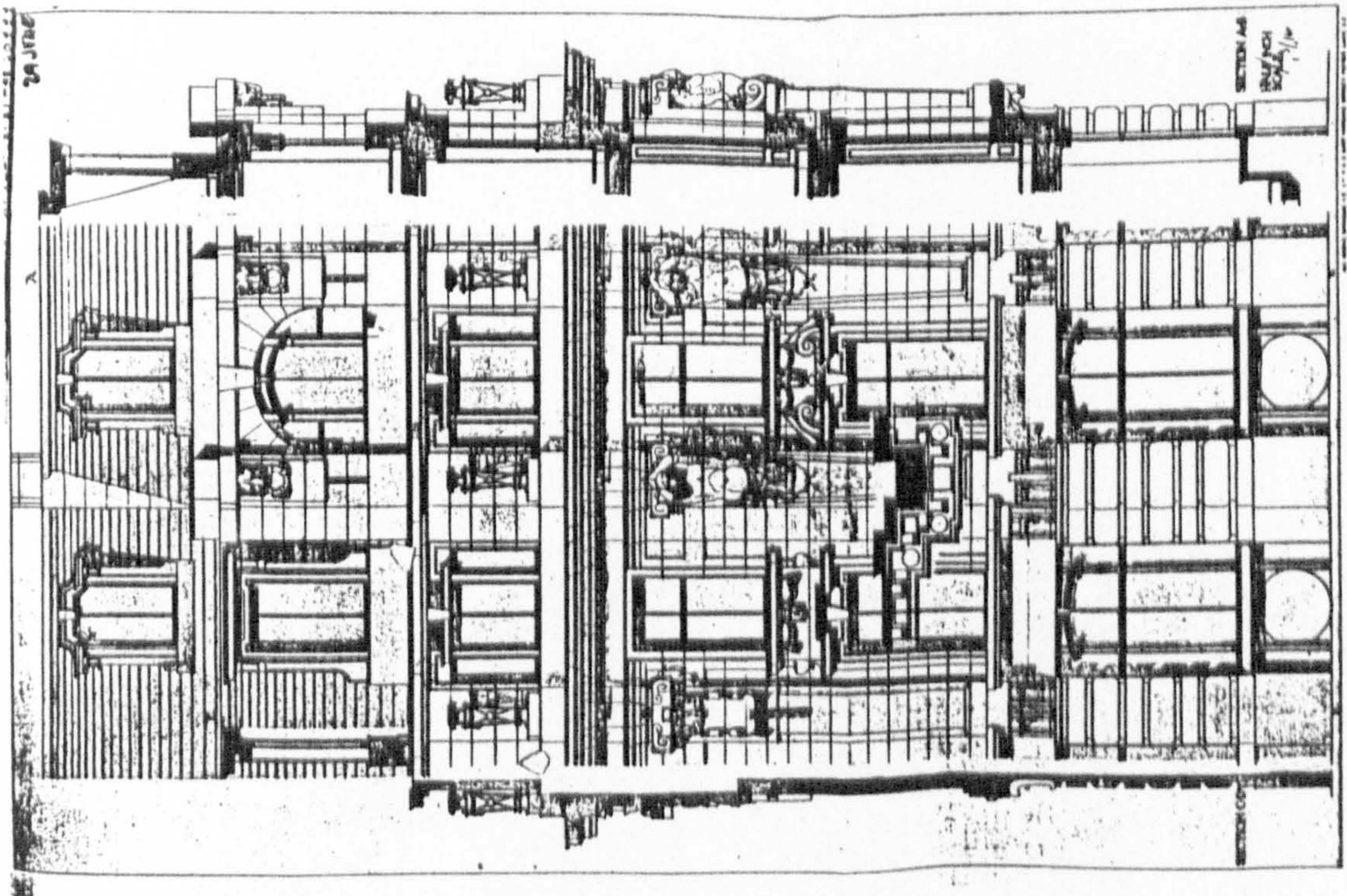
UNION ASSURANCE SOCIETY OFFICES, ROYAL EXCHANGE—James Easton, James & Thomas, 1907

9-17
UNION ASSURANCE OFFICES, City, 1907
SAVINGS BANK, Glasgow, 1896
9-18





9-19
 ELECTRA HOUSE, City, 1900
 WINCHESTER HOUSE, City, 1907
 9-20

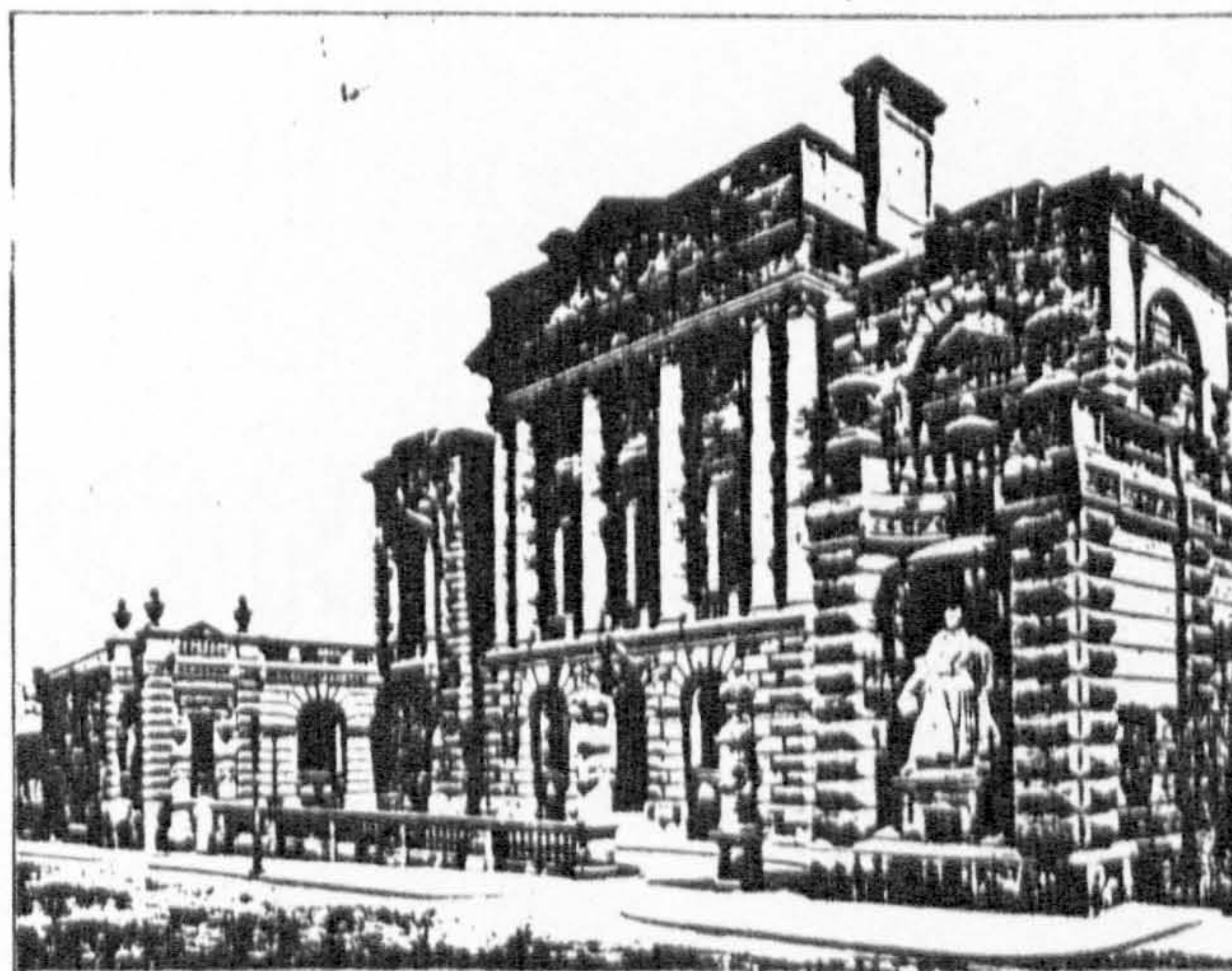




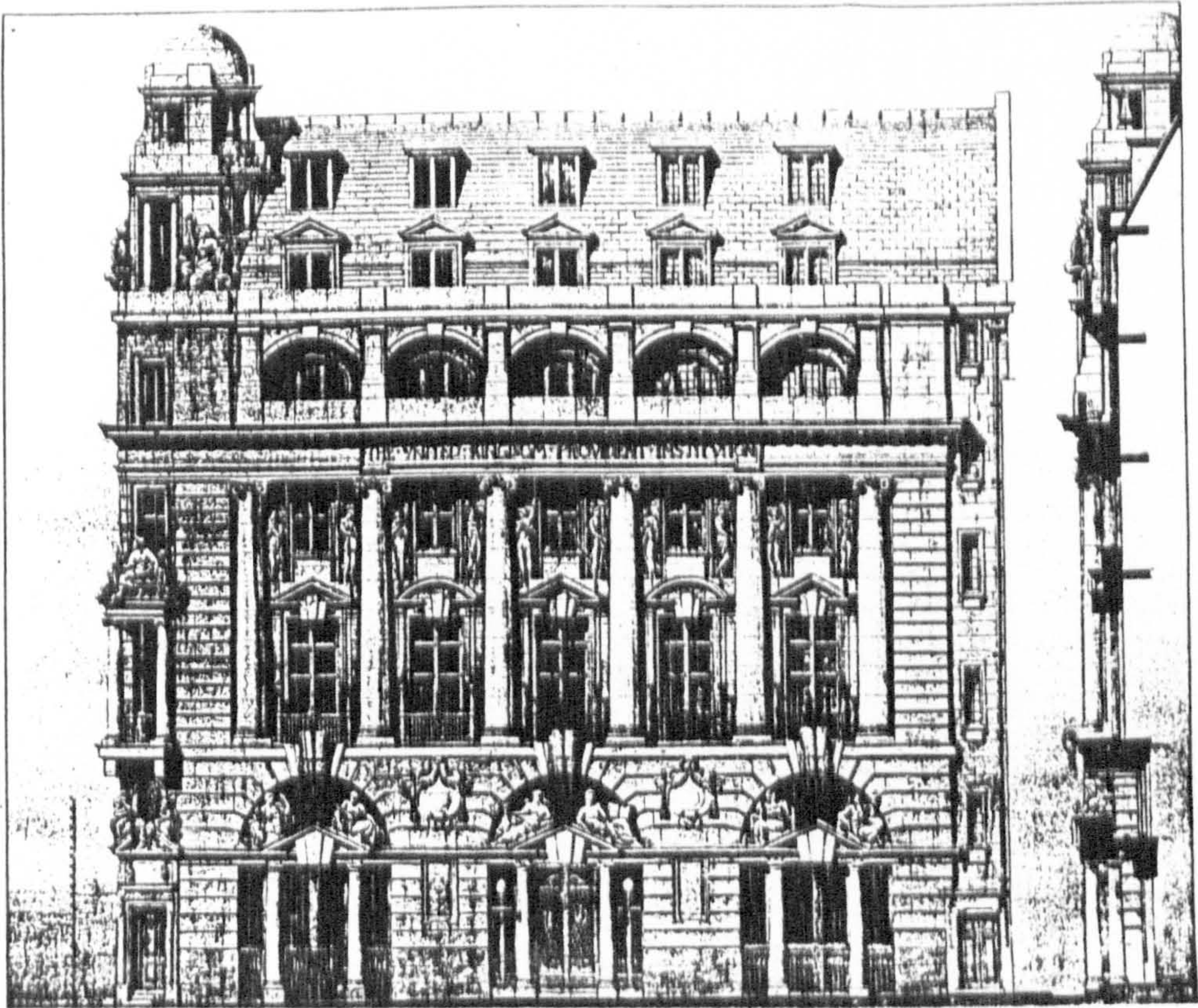
9-21

ROYAL LONDON FRIENDLY SOCIETY, City, 1903
NORWICH UNION LIFE INSURANCE CO., Norwich, 1907

9-22



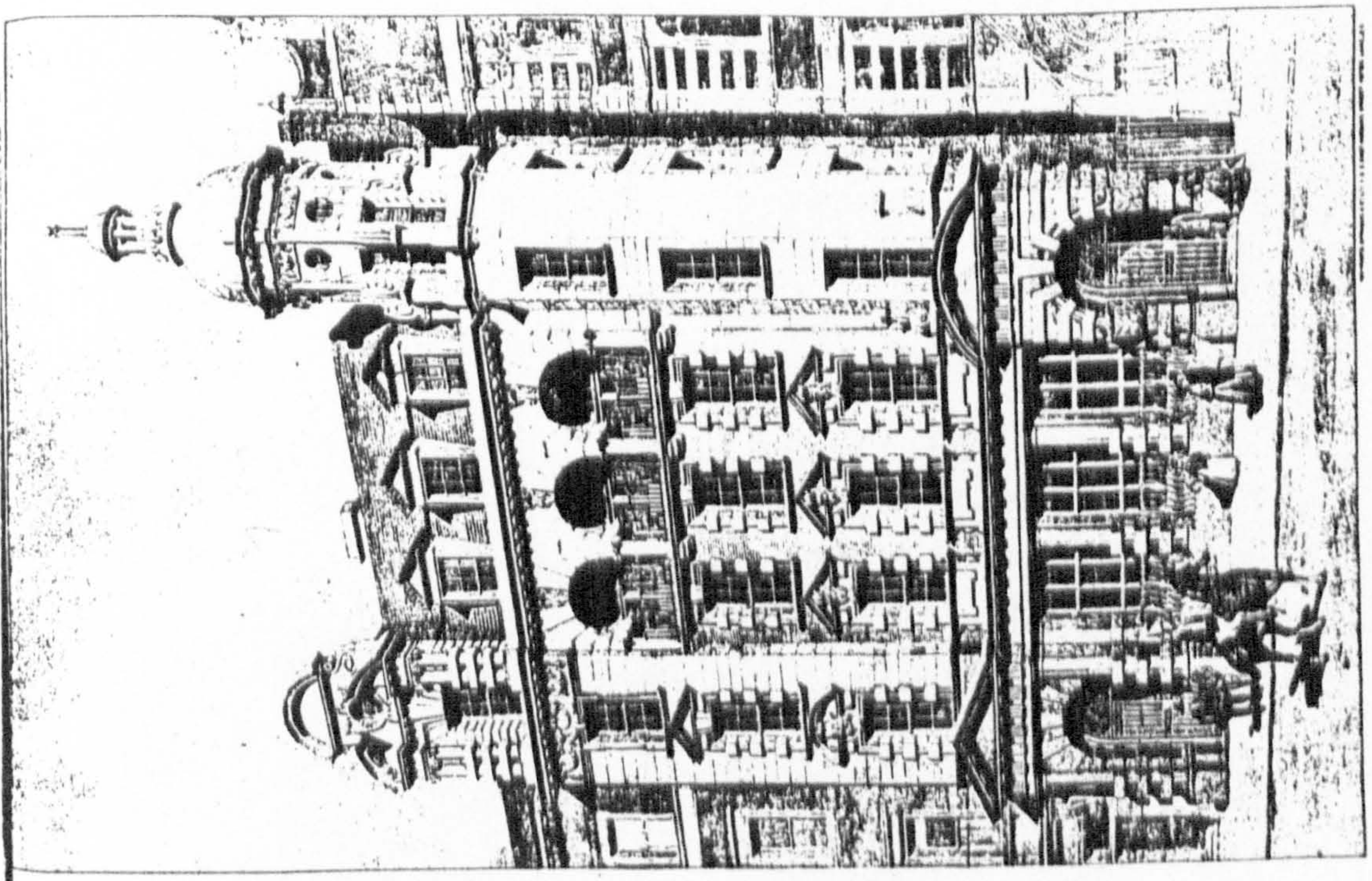
NEW HEAD OFFICE FOR THE NORWICH UNION LIFE INSURANCE COMPANY NORWICH GEORGE J. SKIPPER, F.R.I.B.A. AND J. W. SKIPPER, ARCHITECTS.

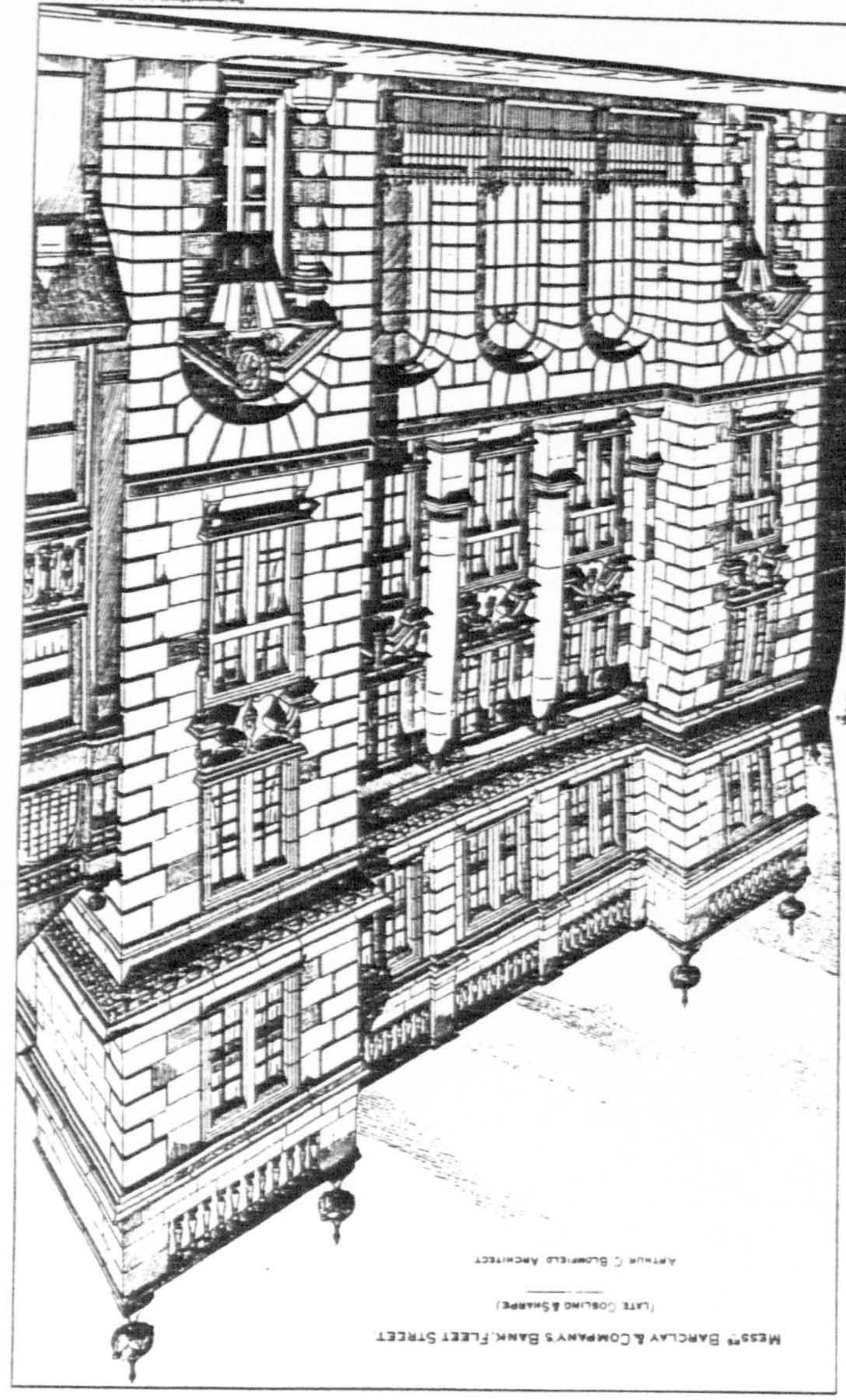


9-23

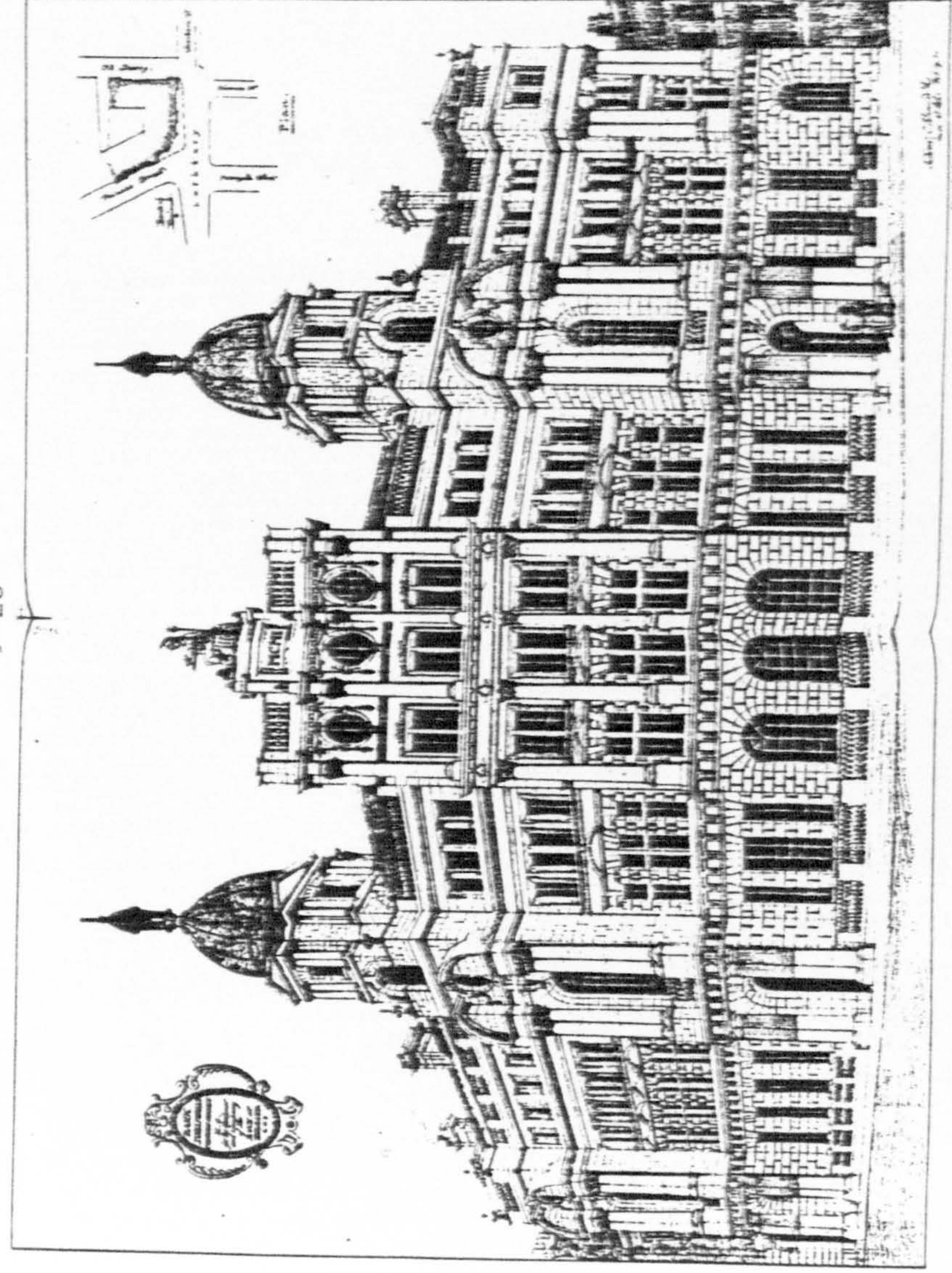
UNITED KINGDOM PROVIDENT INSTITUTION, City, 1906
54 PARLIAMENT STREET, Westminster, 1899

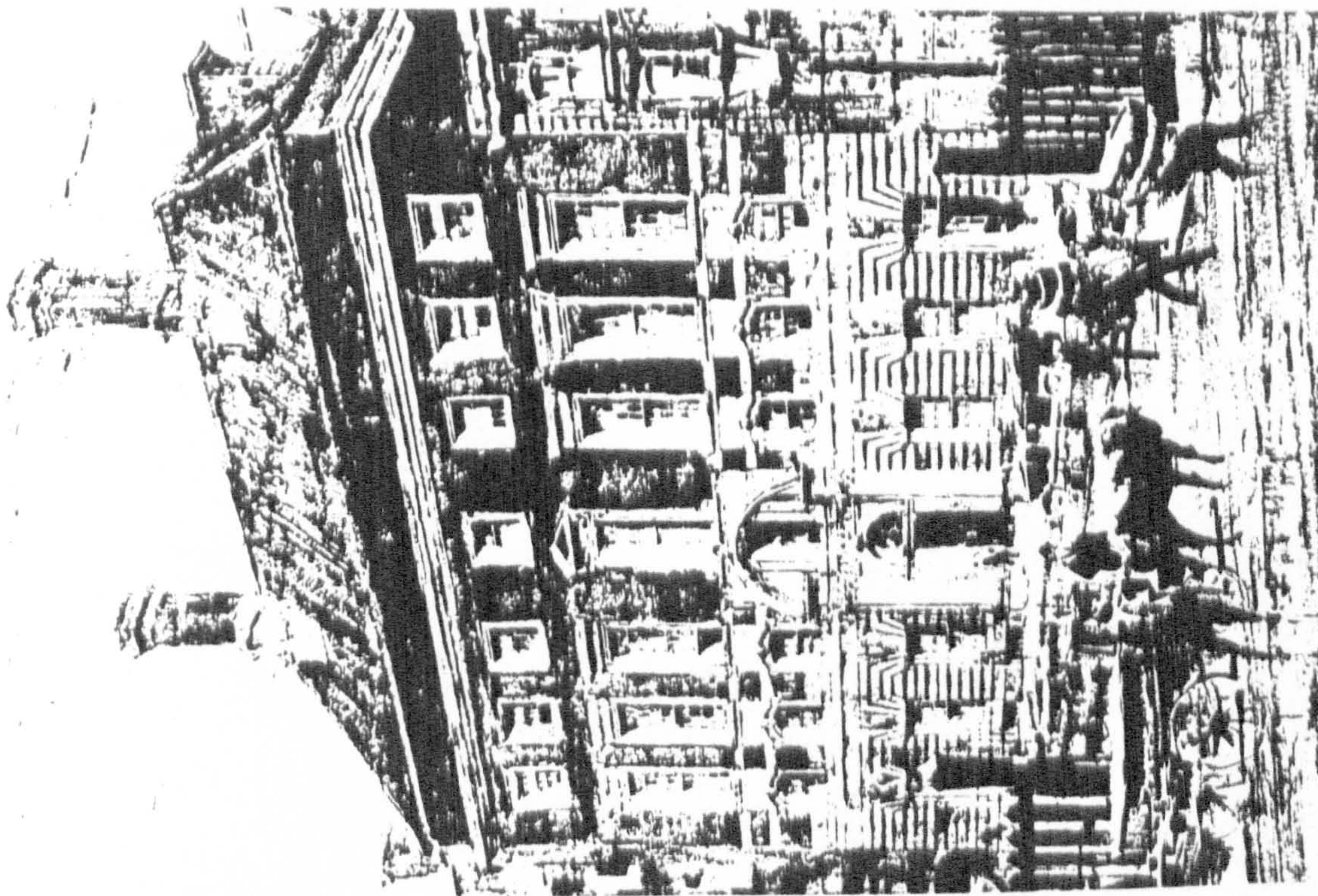
9-24





9-27
 BARCLAY AND CO. BANK, City, 1896
 BANK BUILDINGS, City, 1901
 9-28

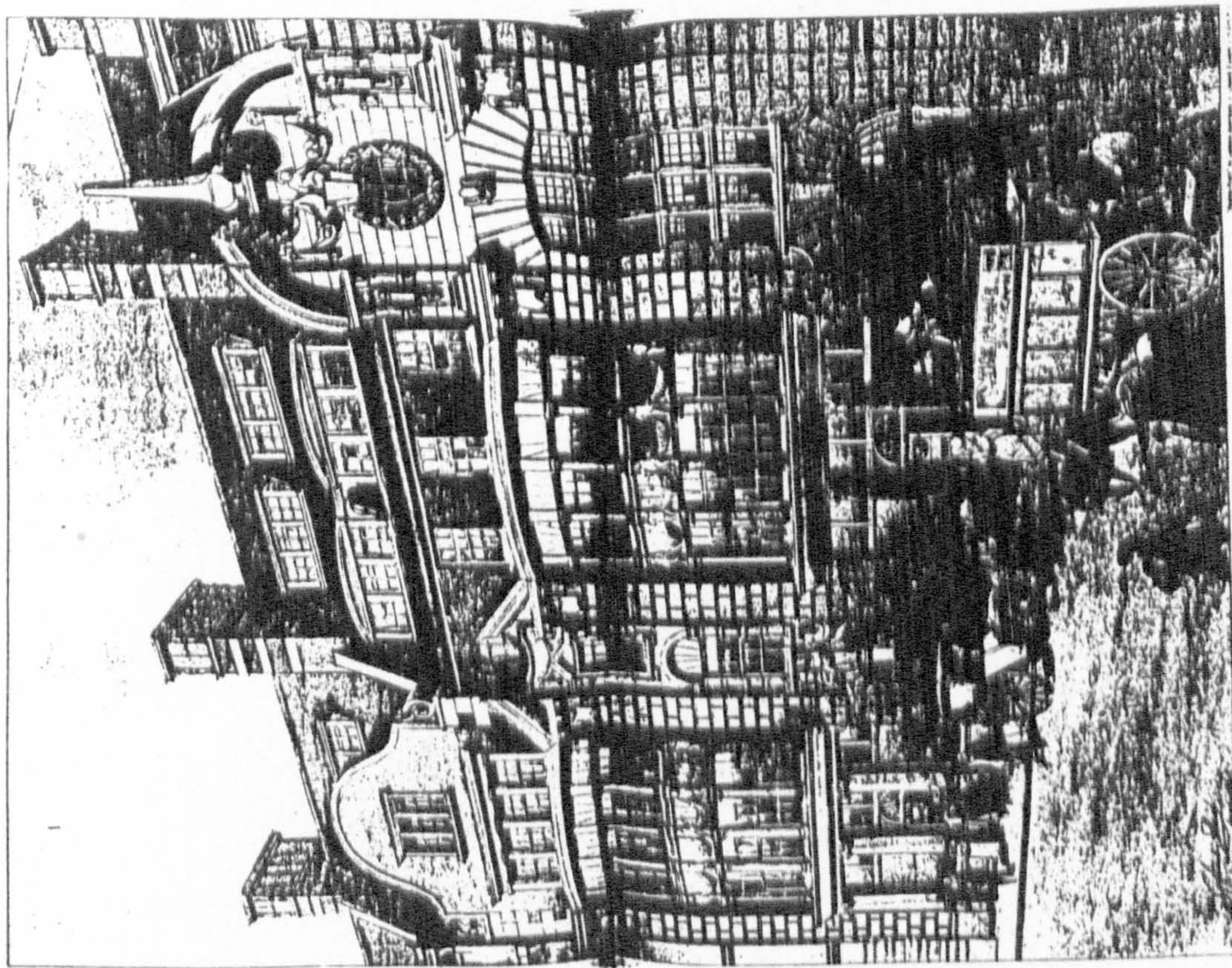




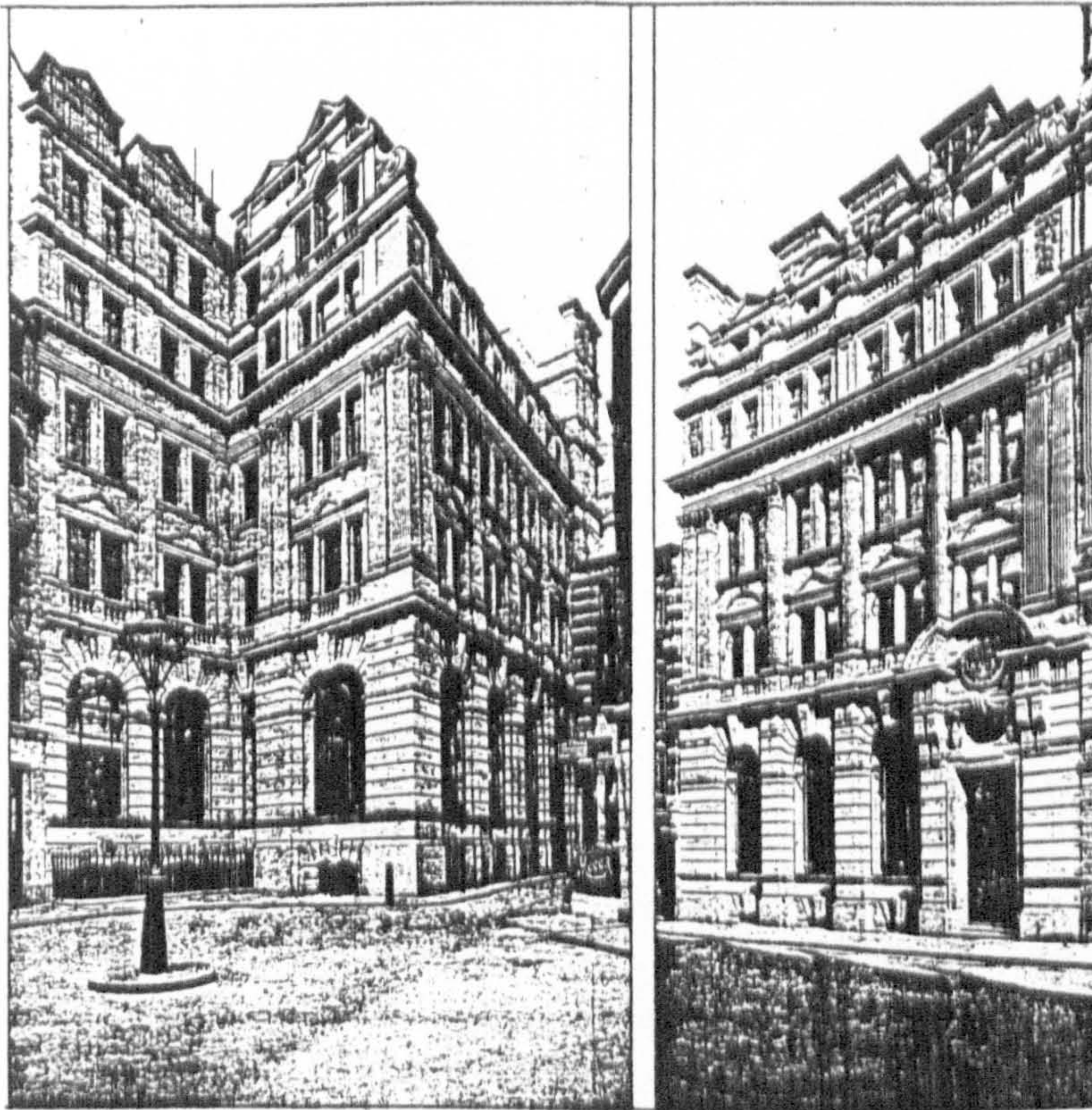
9-29

COUNTRY LIFE OFFICES, Westminster, 1904
 NEWGATE STREET OFFICES, City, 1902

9-30



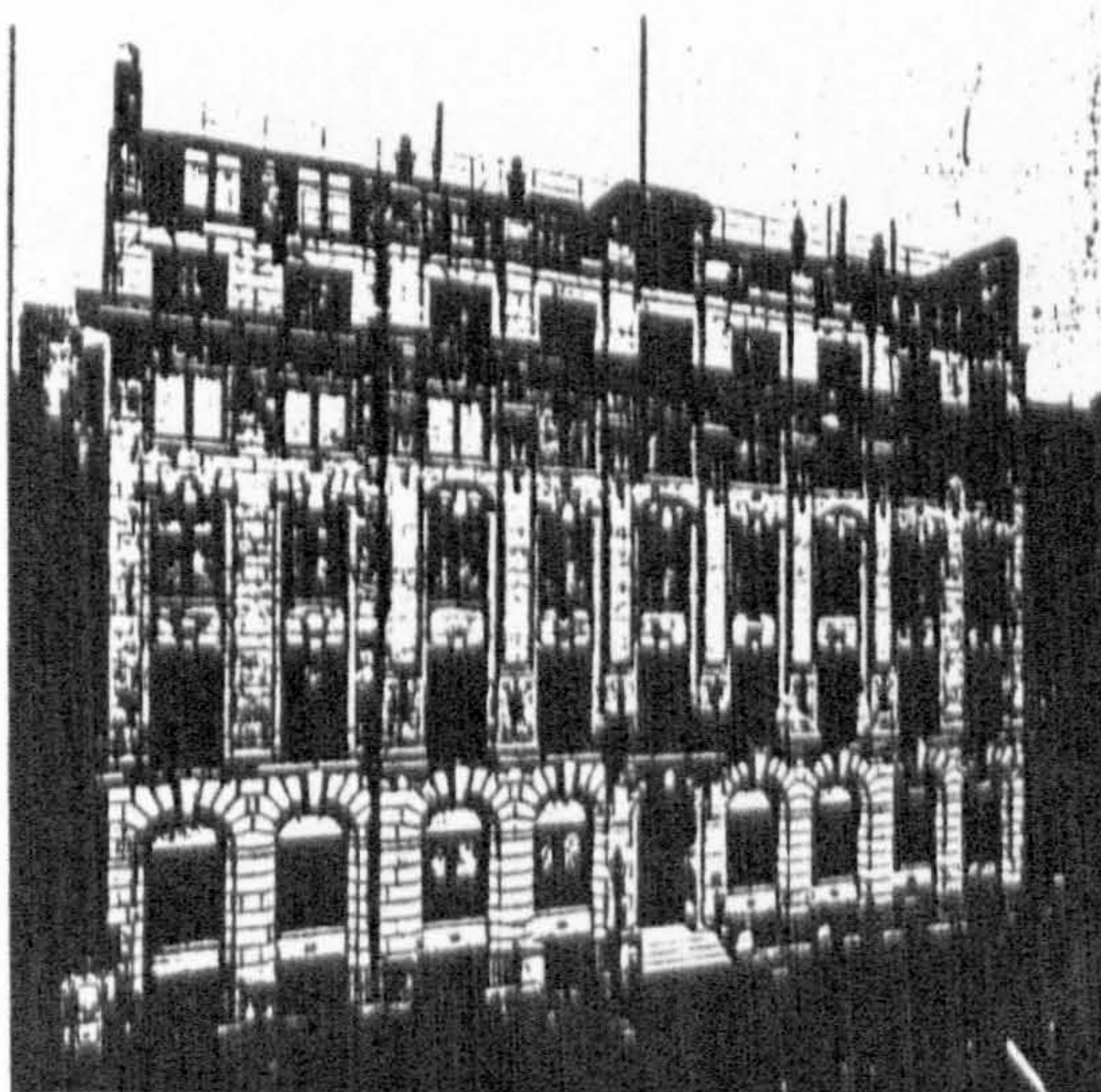
PREMISES, NEWGATE STREET, E.C.
 C. STURLEY PEACH, ARCHITECT.



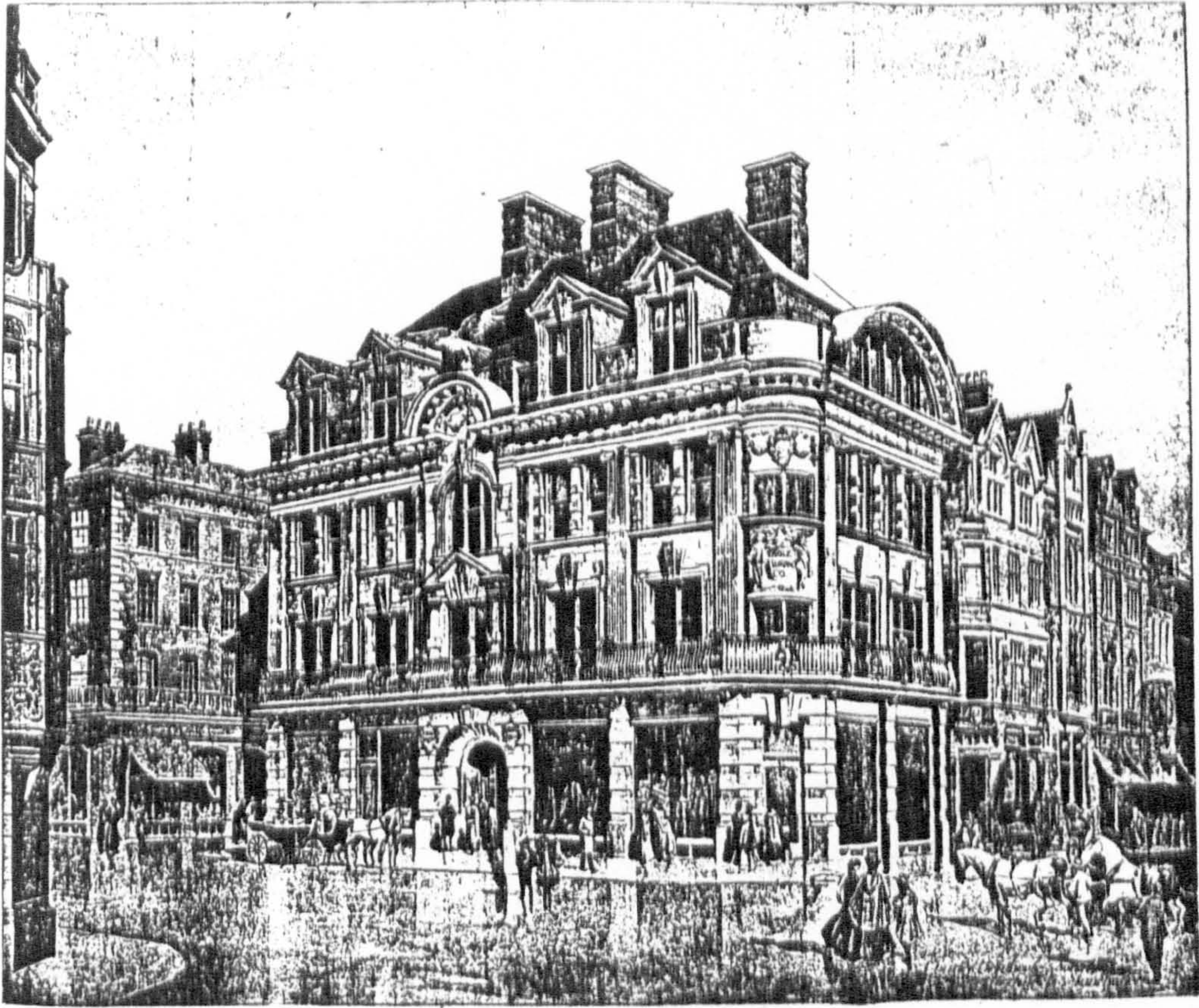
9-31

CHARTERED BANK OF INDIA, AUSTRALIA AND CHINA, City, 1909
17 ST. HELEN'S PLACE, City, 1913

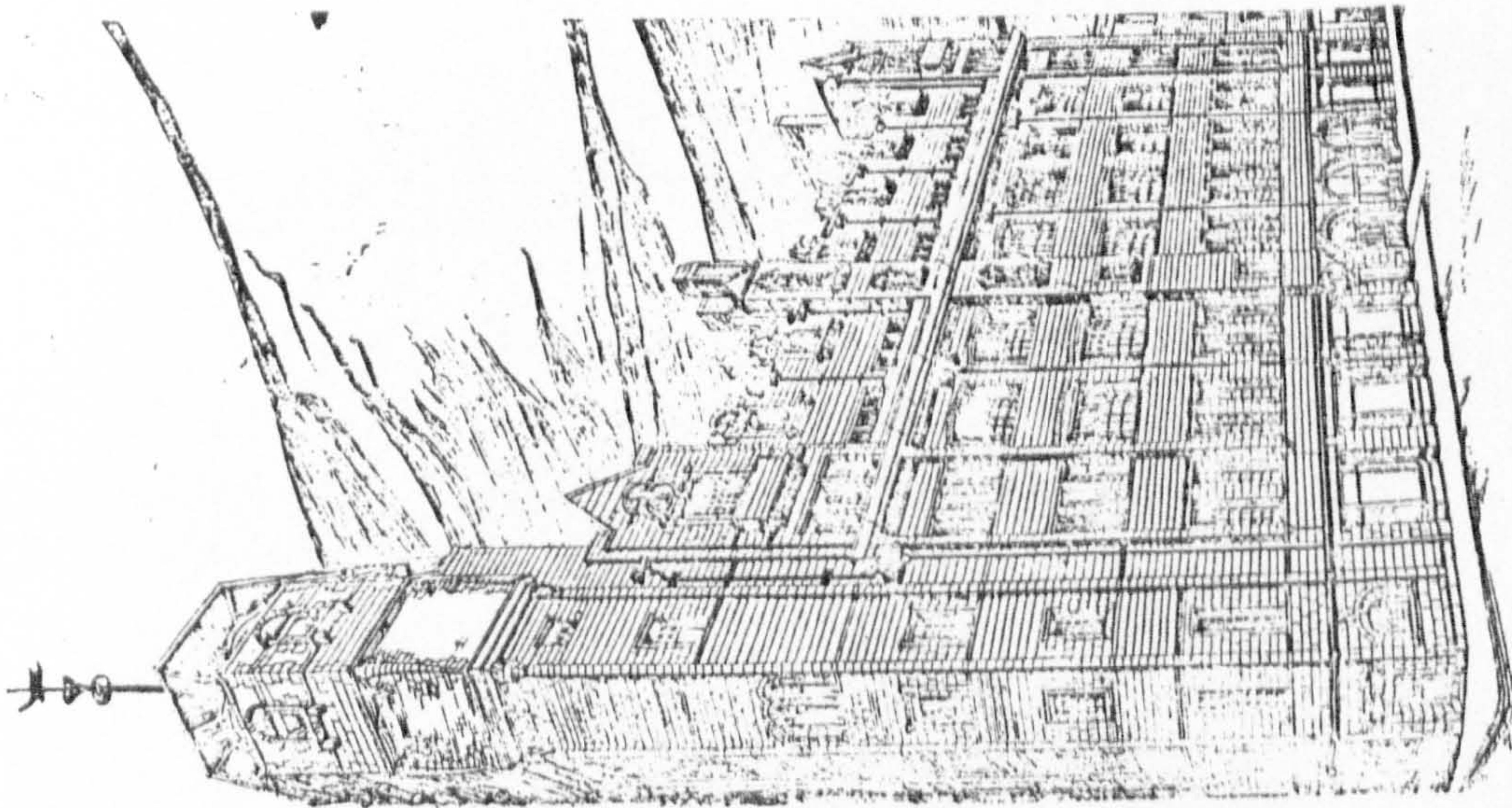
9-32



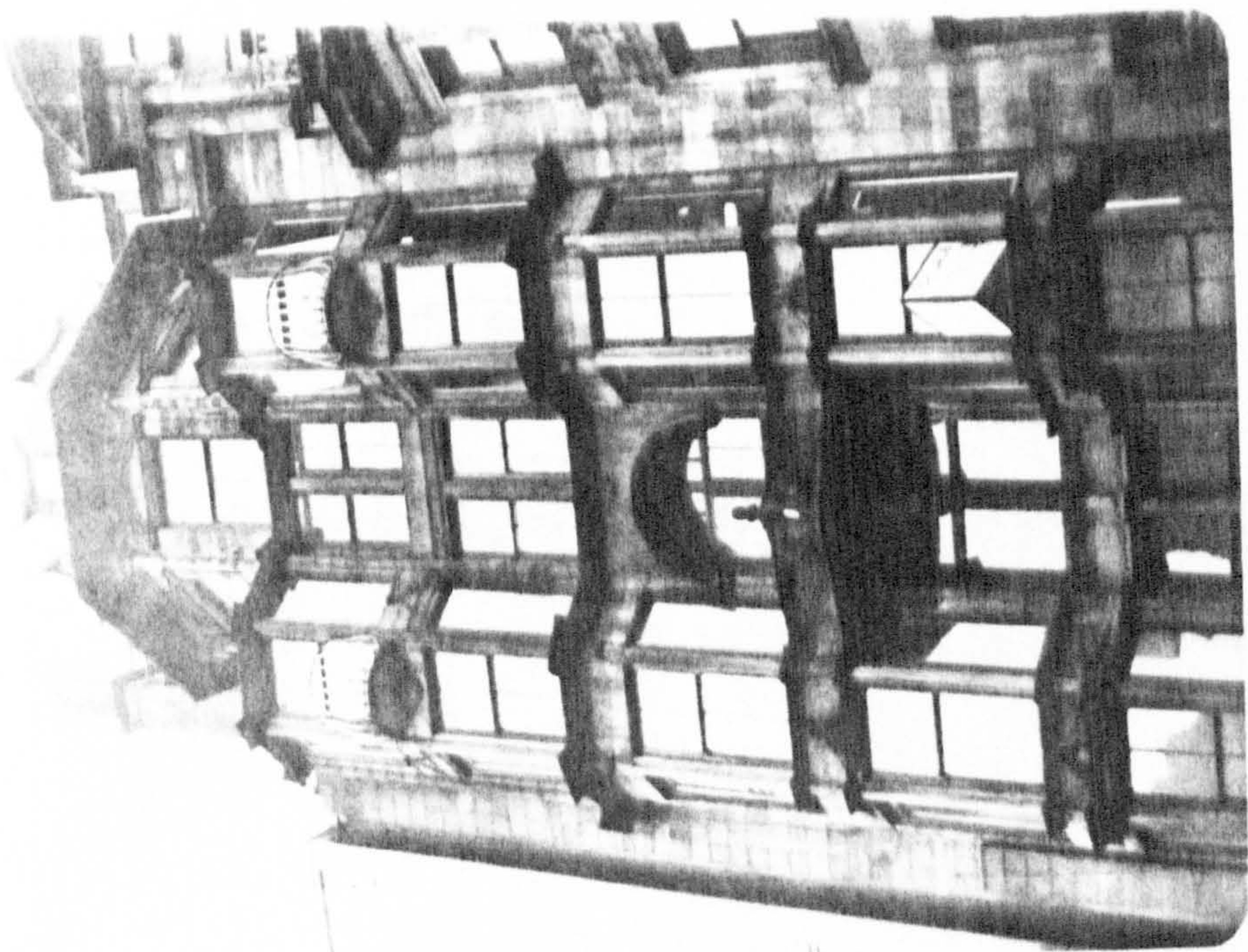
No. 17, St. Helen's Place, E.C.
Mr. H. Chubb & Co., F.R.S.A., Architects.



9-33
 EAGLE ASSURANCE BUILDING, Manchester, 1902
 GLASGOW HERALD, Glasgow, 1893
 9-34



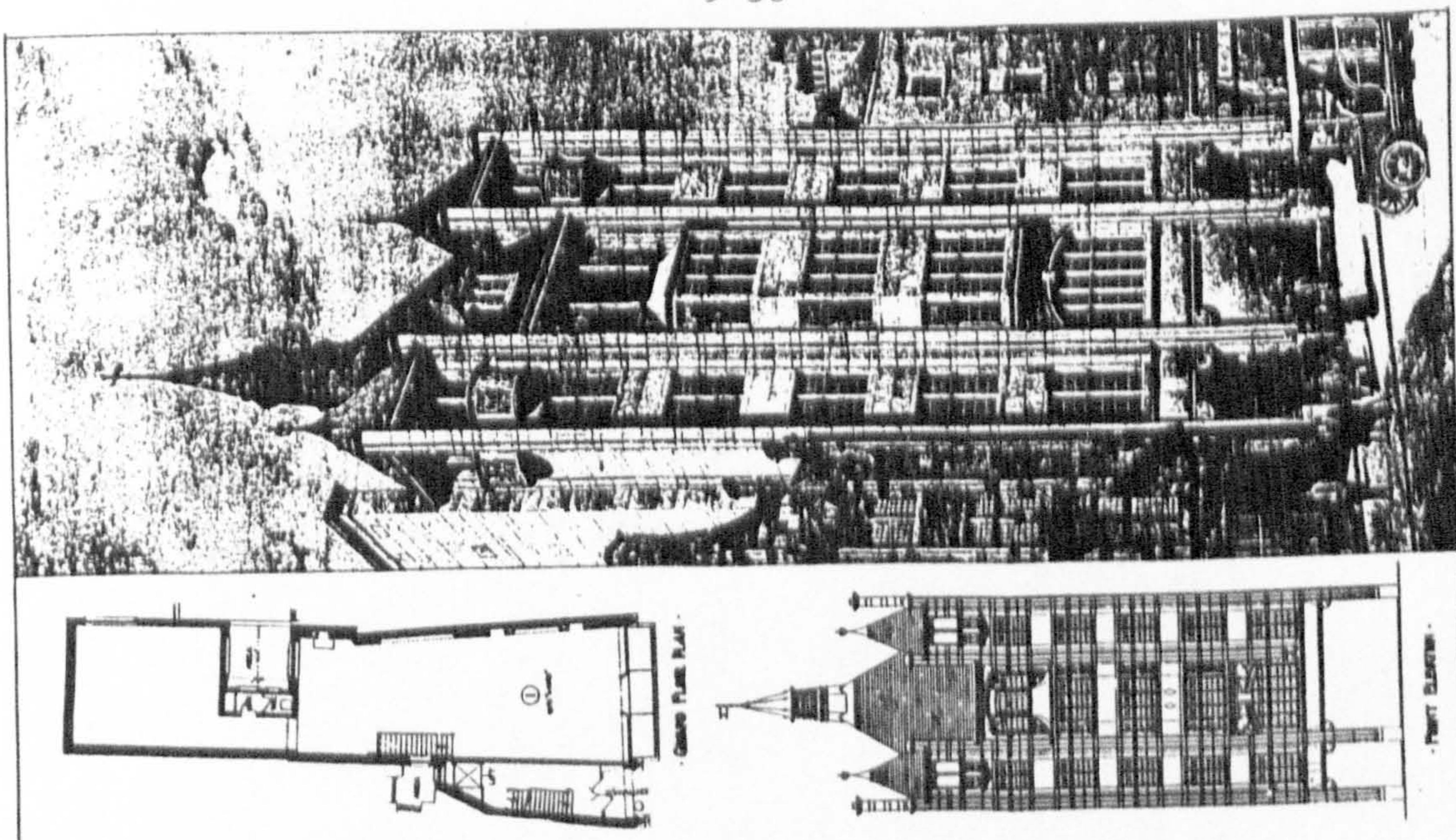
The Herald Buildings. (Messrs. Hensyman & Kippie.)



9-35

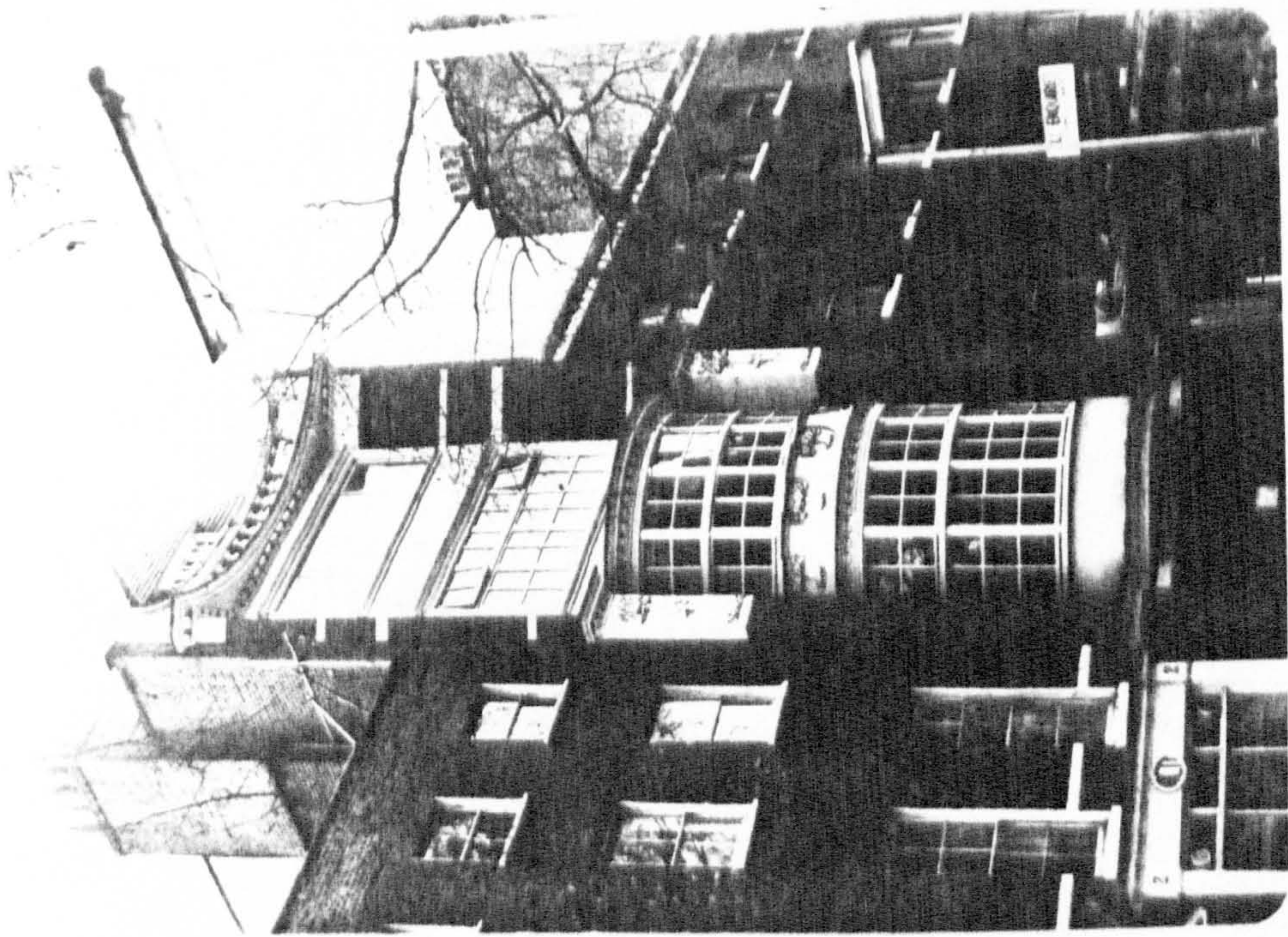
ST. VINCENTS CHAMBERS, Glasgow, 1899
WHITEHALL HOUSE, Westminster, 1905

9-36



WHITEHALL HOUSE (GRADING CLASS) WESTMINSTER, LONDON, 1905

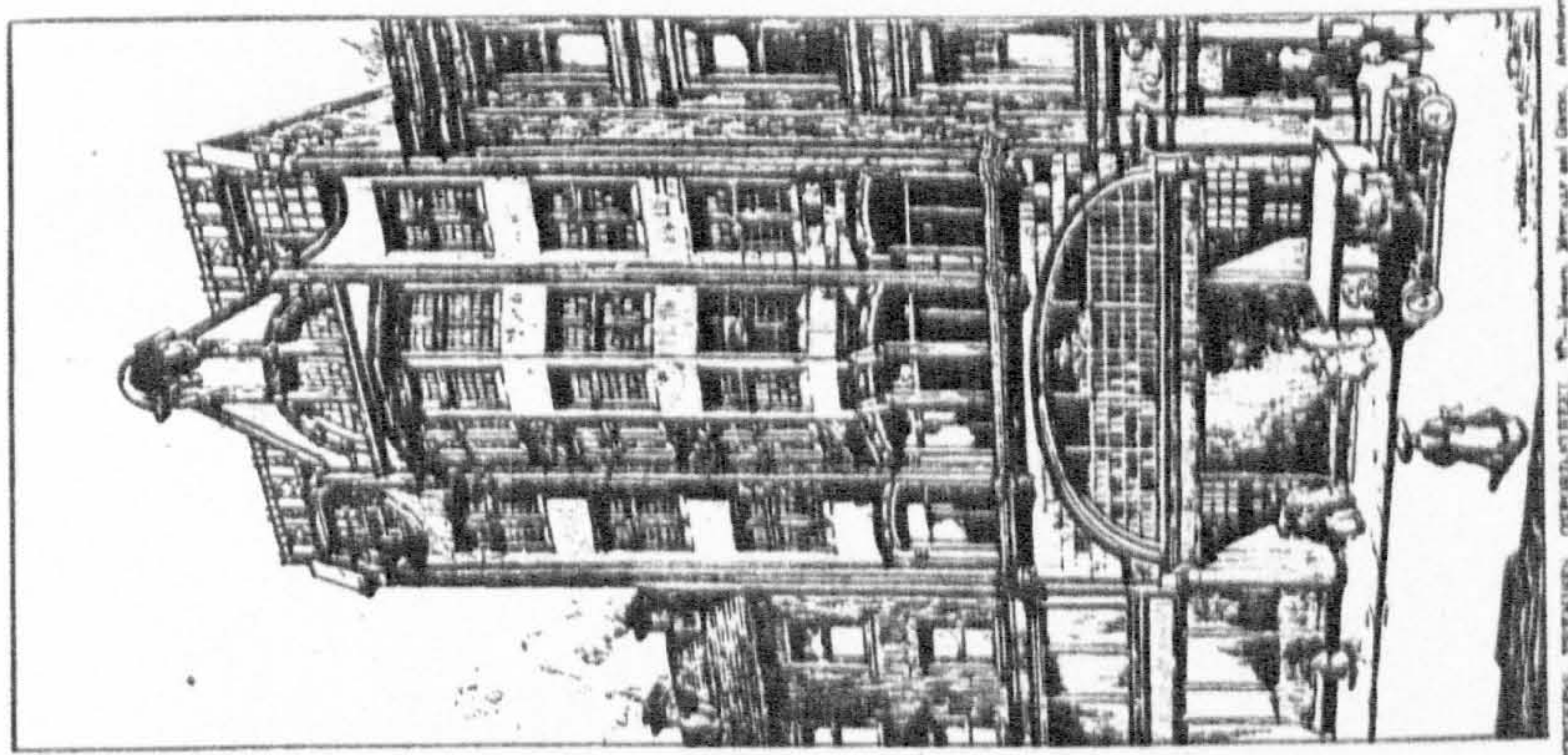
10. Elevation of

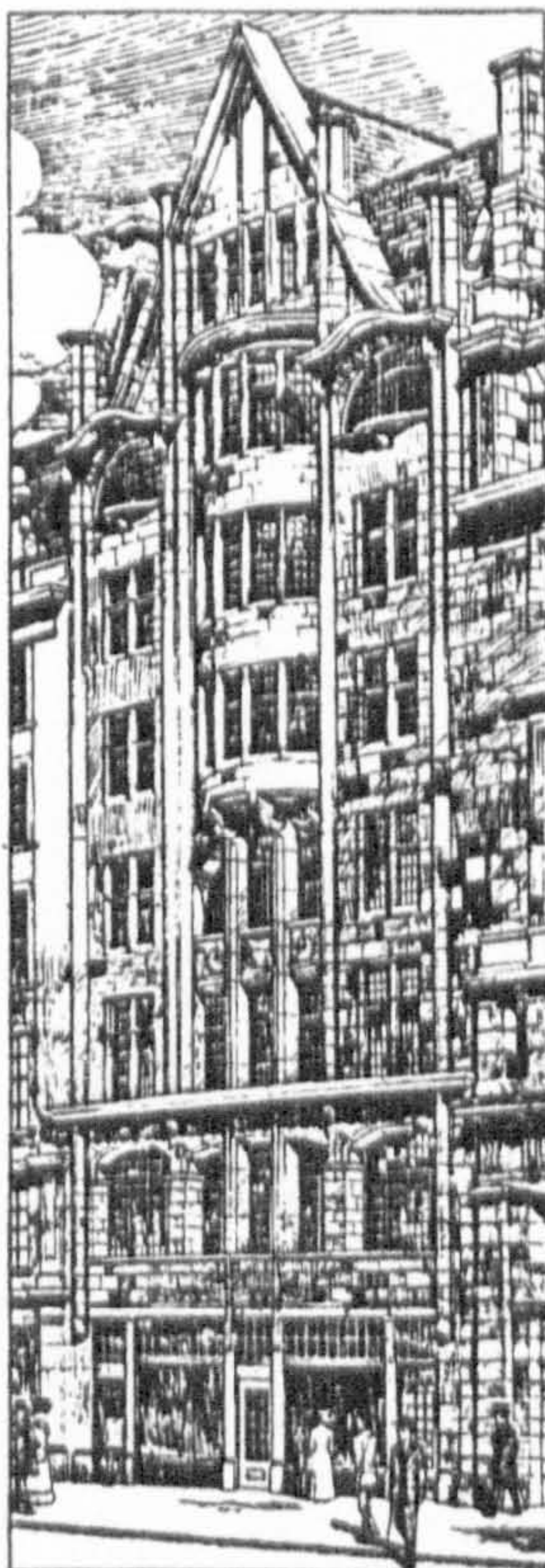


9-37

SOHO SQUARE OFFICE, Westminster, 1903
OXFORD STREET OFFICES, Westminster, 1913

9-38



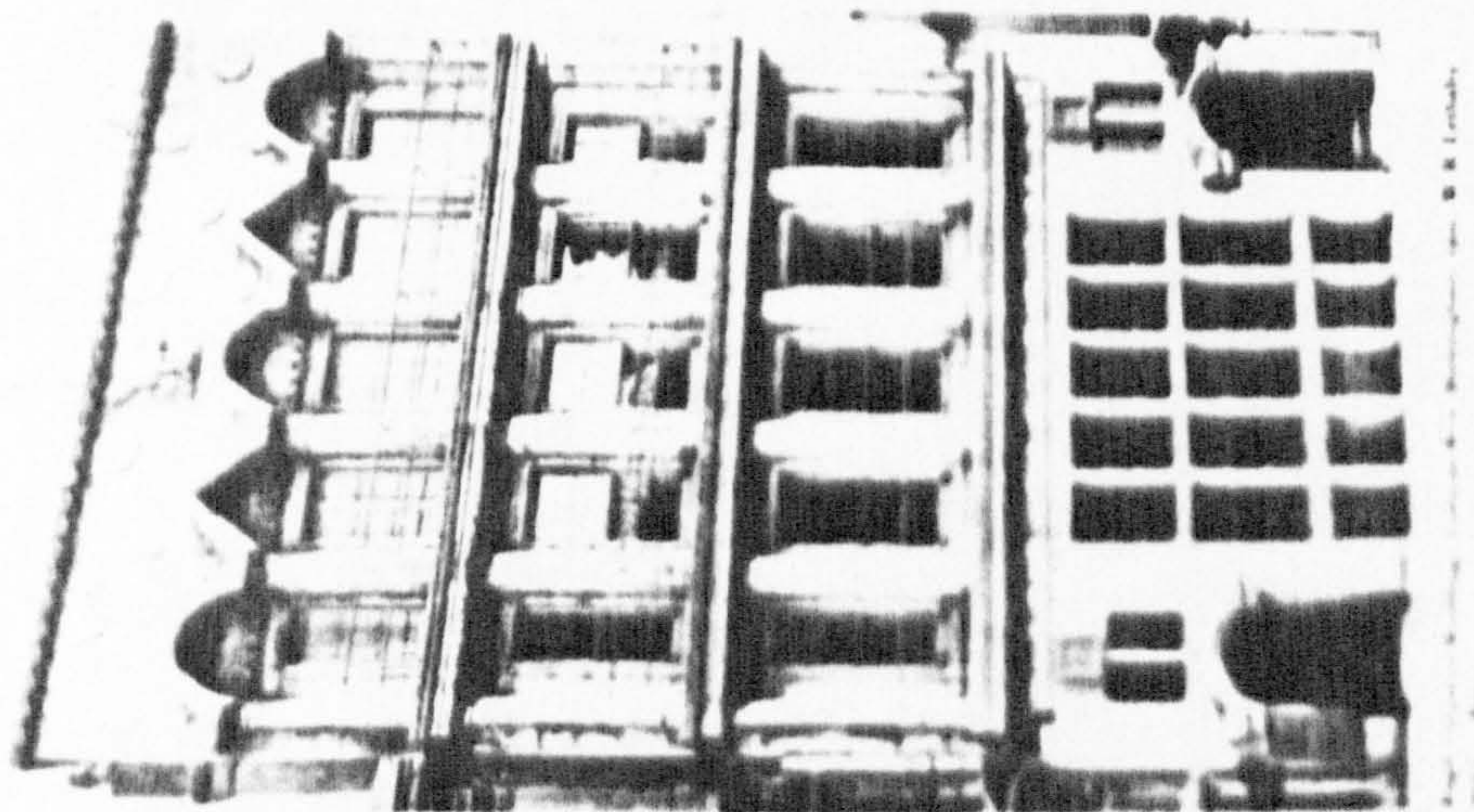


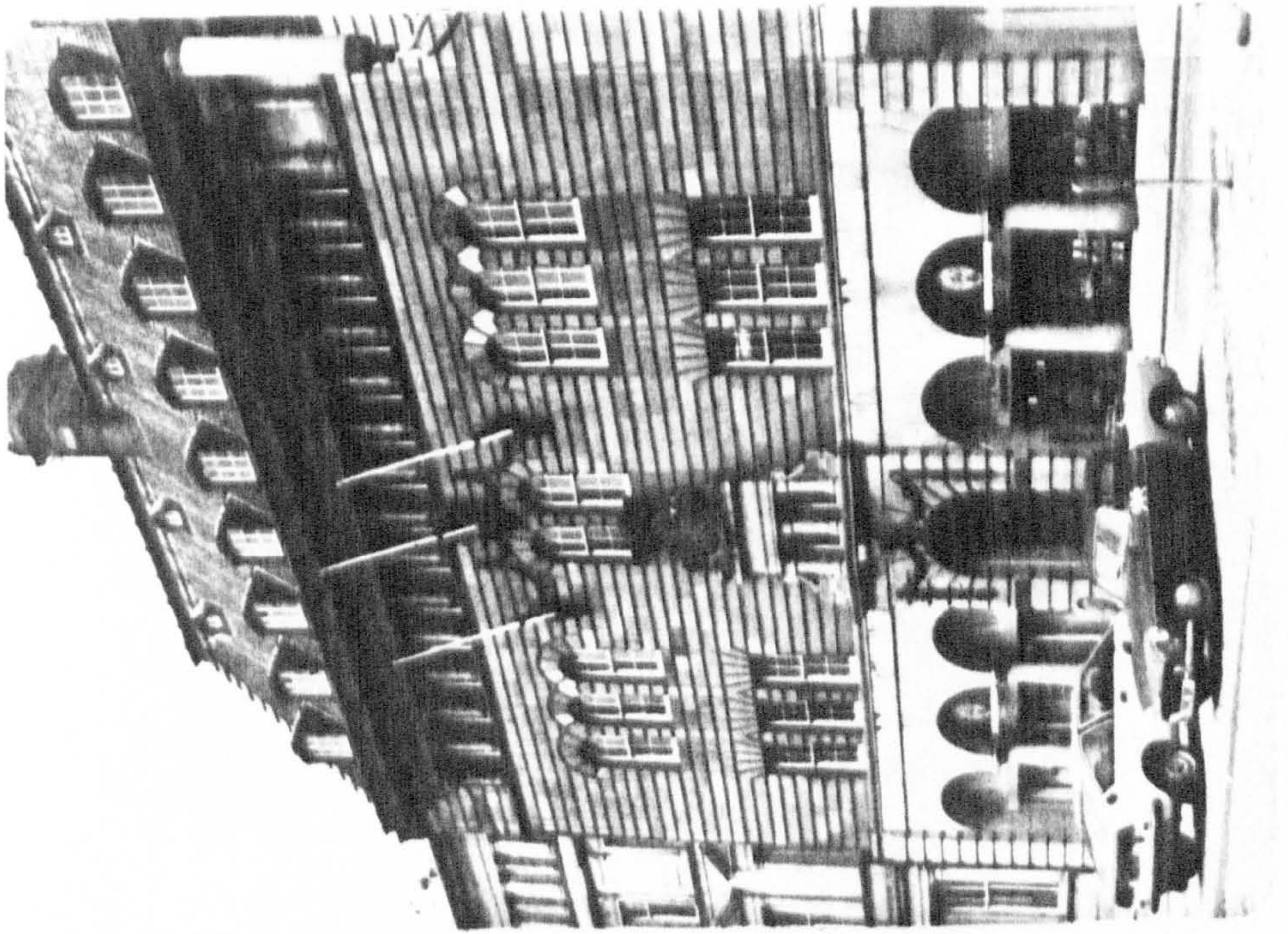
KINGSWAY CHAMBERS, KINGSWAY—Hosmer, Mortimer and Green, Architects.

9-39

KINGSWAY CHAMBERS, Westminster, 1912
EAGLE INSURANCE BUILDING, Birmingham, 1899

9-40

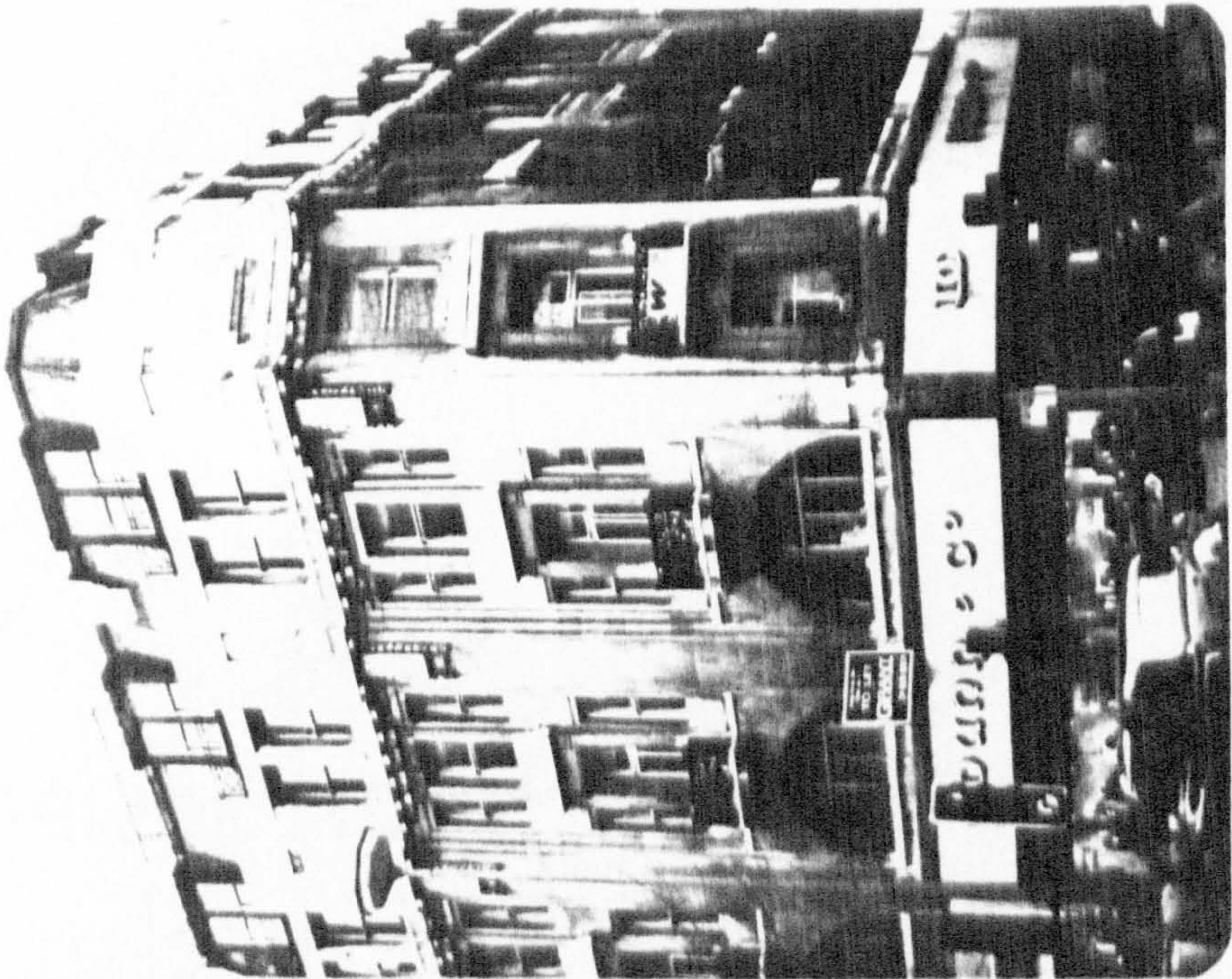


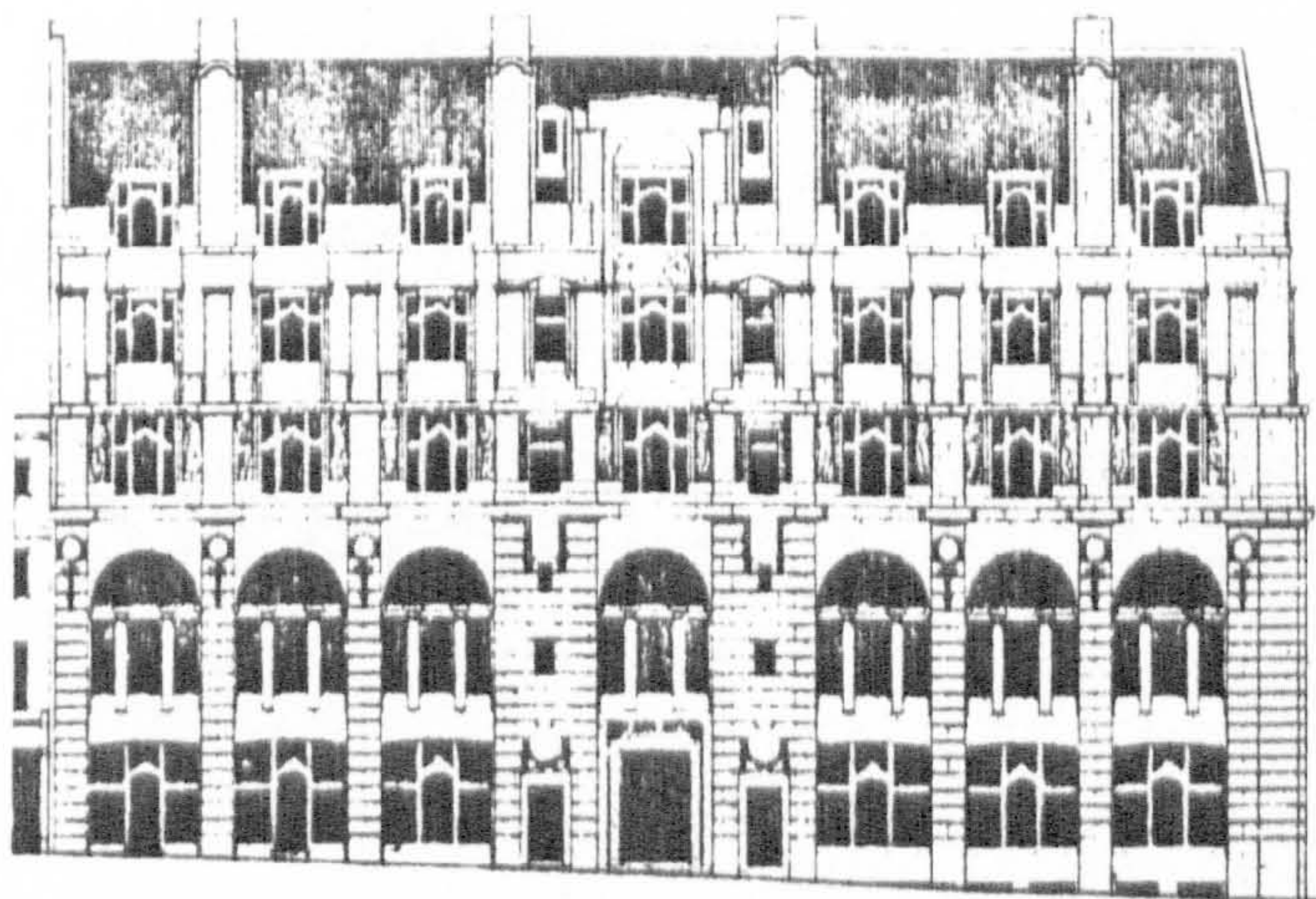


9-41

CHURCH OF SCOTLAND OFFICE, Edinburgh, 1911
EVELYN HOUSE, Westminster, 1908

9-42



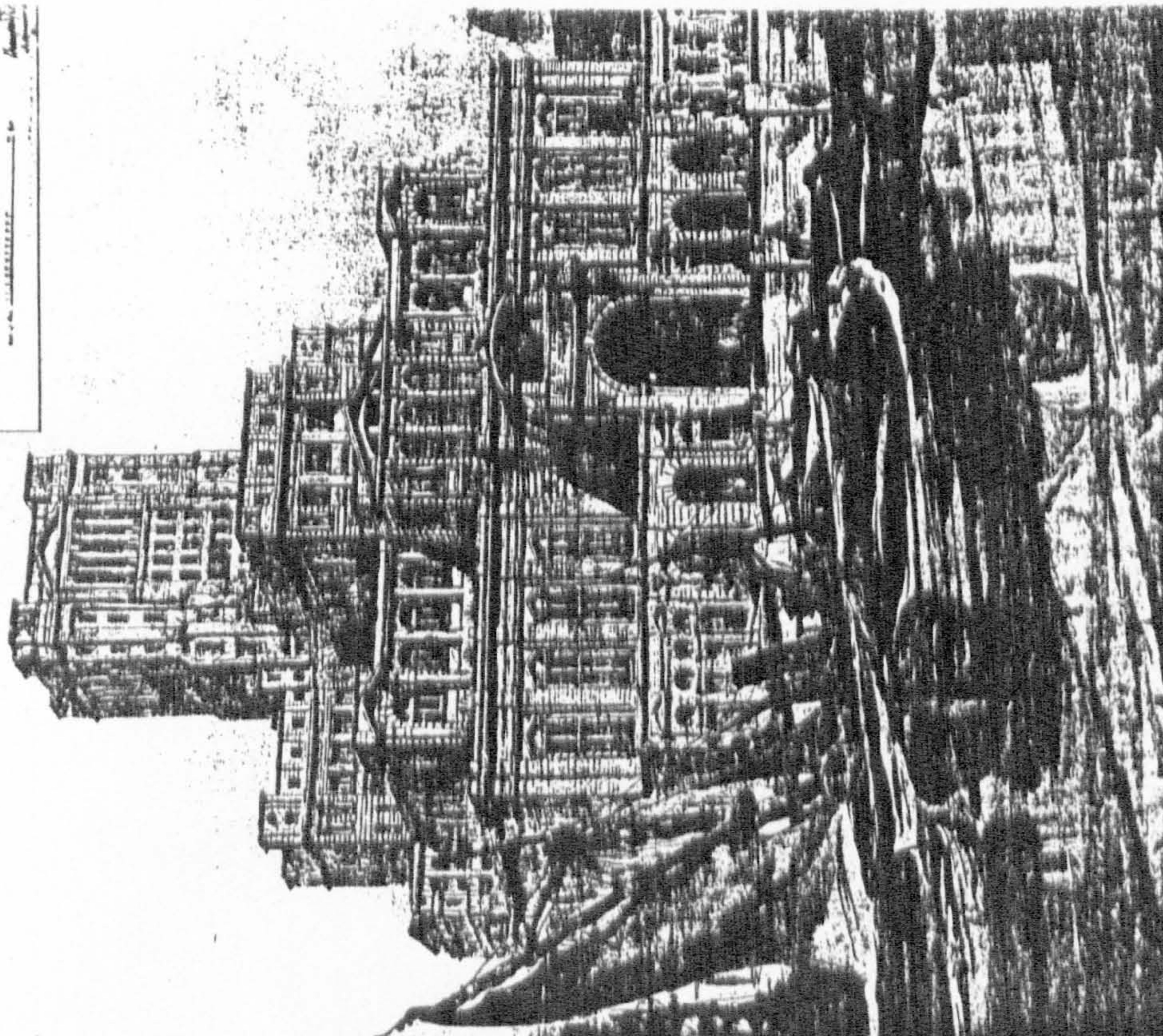
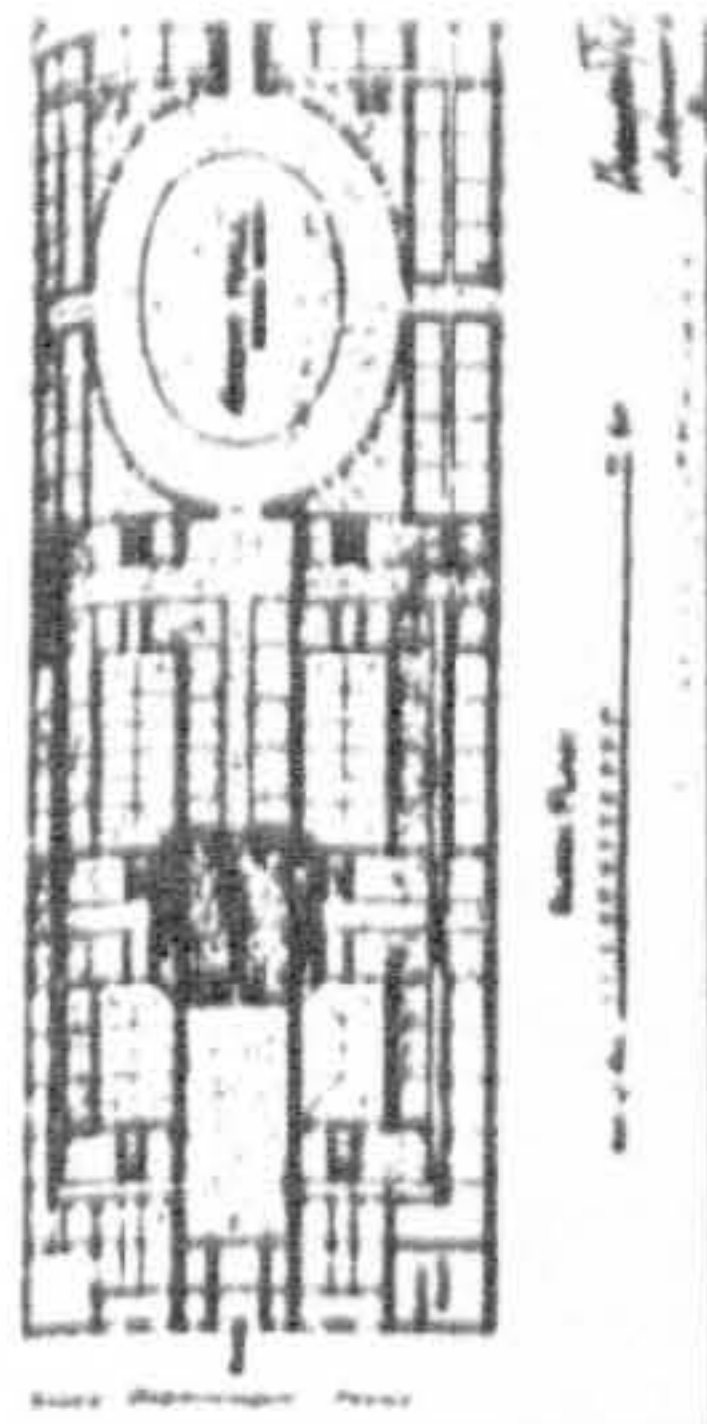


New Building for British Medical Association, Agar Street, Strand, London.
H. Percy Adams, F.R.I.B.A., Architect.

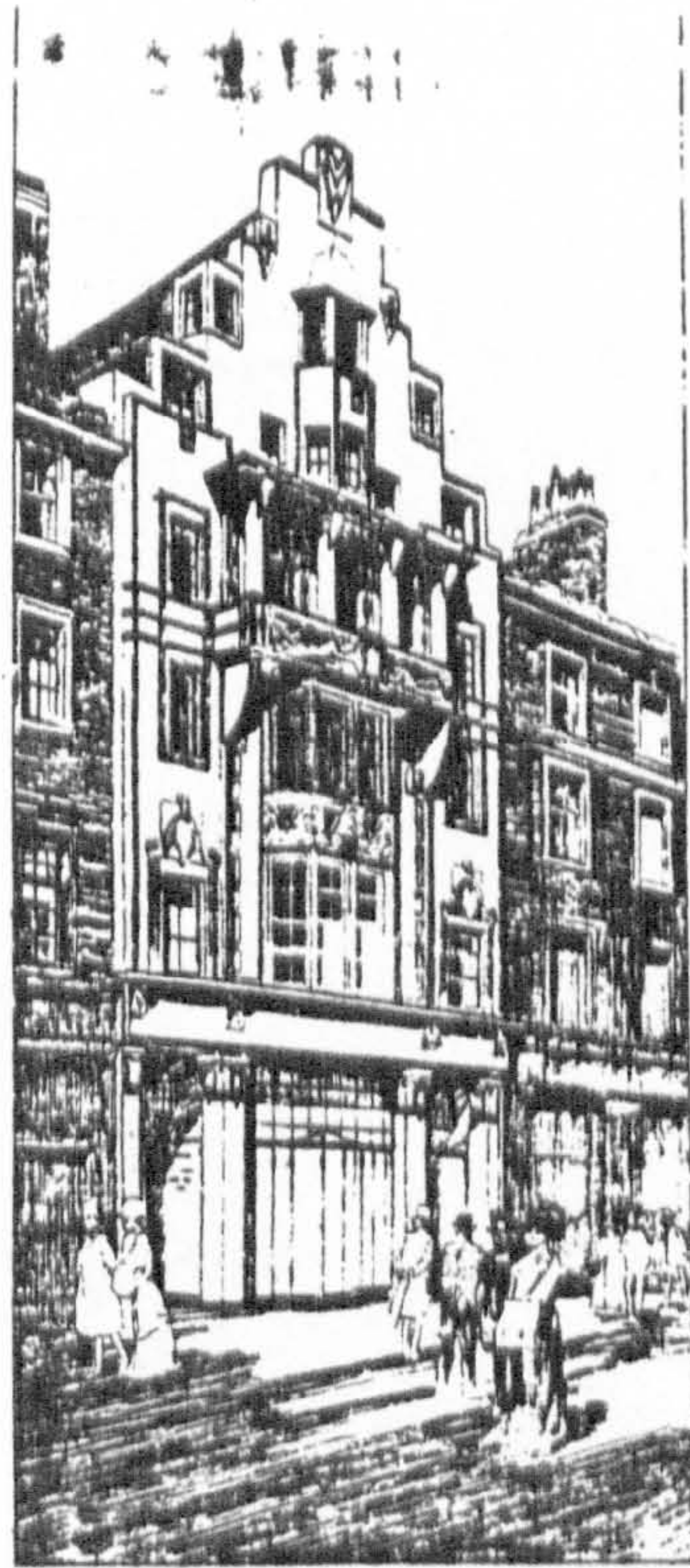
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BRITISH MEDICAL ASSOCIATION, Westminster, 1906
THAMES EMBANKMENT OFFICE, London, 1902

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DESIGN FOR CENTRAL OFFICES AND PUBLIC HALL, THAMES EMBANKMENT—H. Percy Adams, F.R.I.B.A.

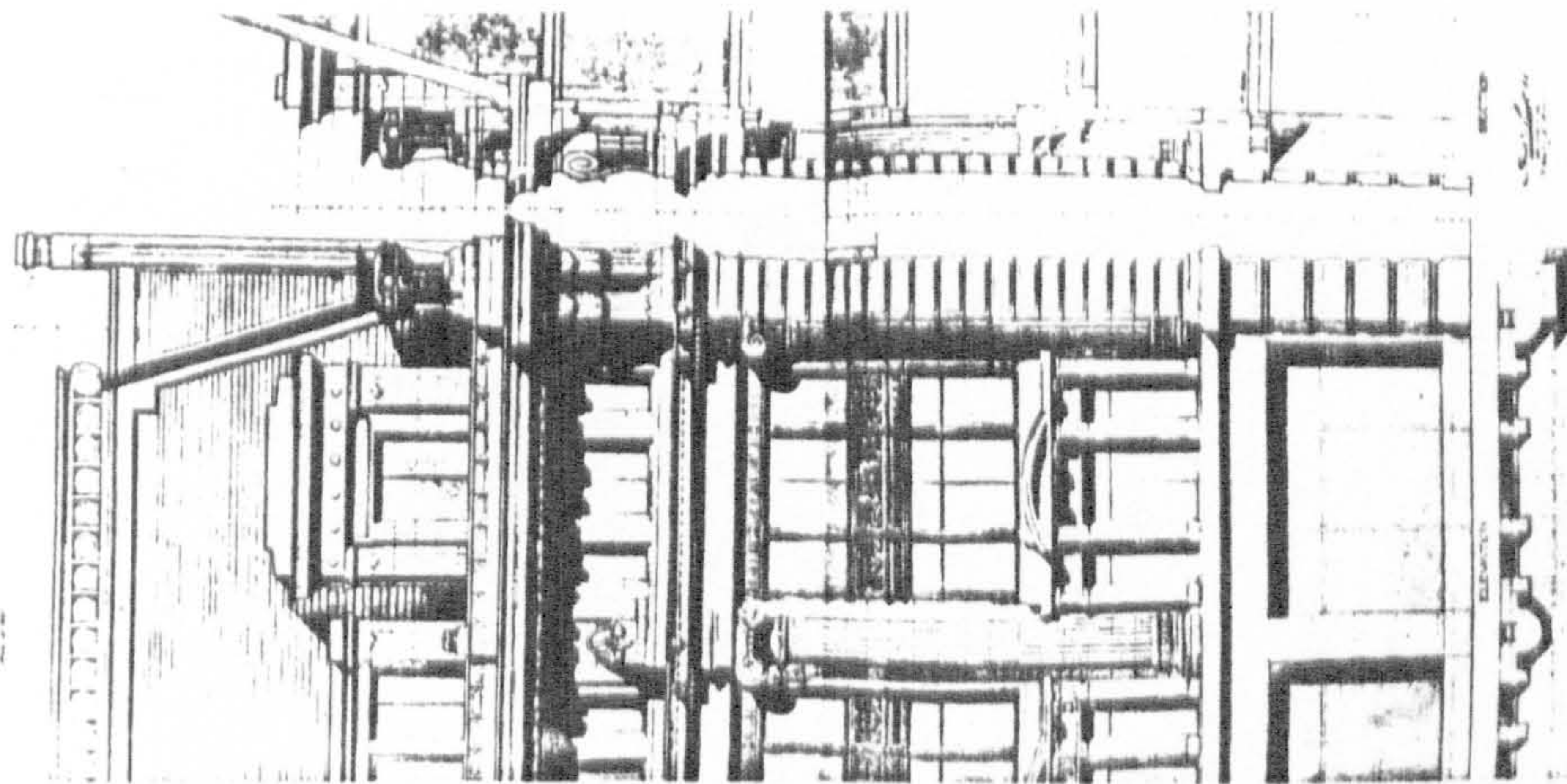


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 CONCRETE OFFICE AND SHOP, 1909
 BANK, Westminster, 1918
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R.A. EXHIBITION.

BANK, Pall Mall East.
 MR. ARTHUR BLONFIELD, ARCHITECT.



1 Sir Albert Richardson (as assistant to Frank T. Verity) Detail
Polytechnic of Central London, upper Regent Street (designed 1907)
A year later, Richardson went into practice in partnership with
Loose Gill.

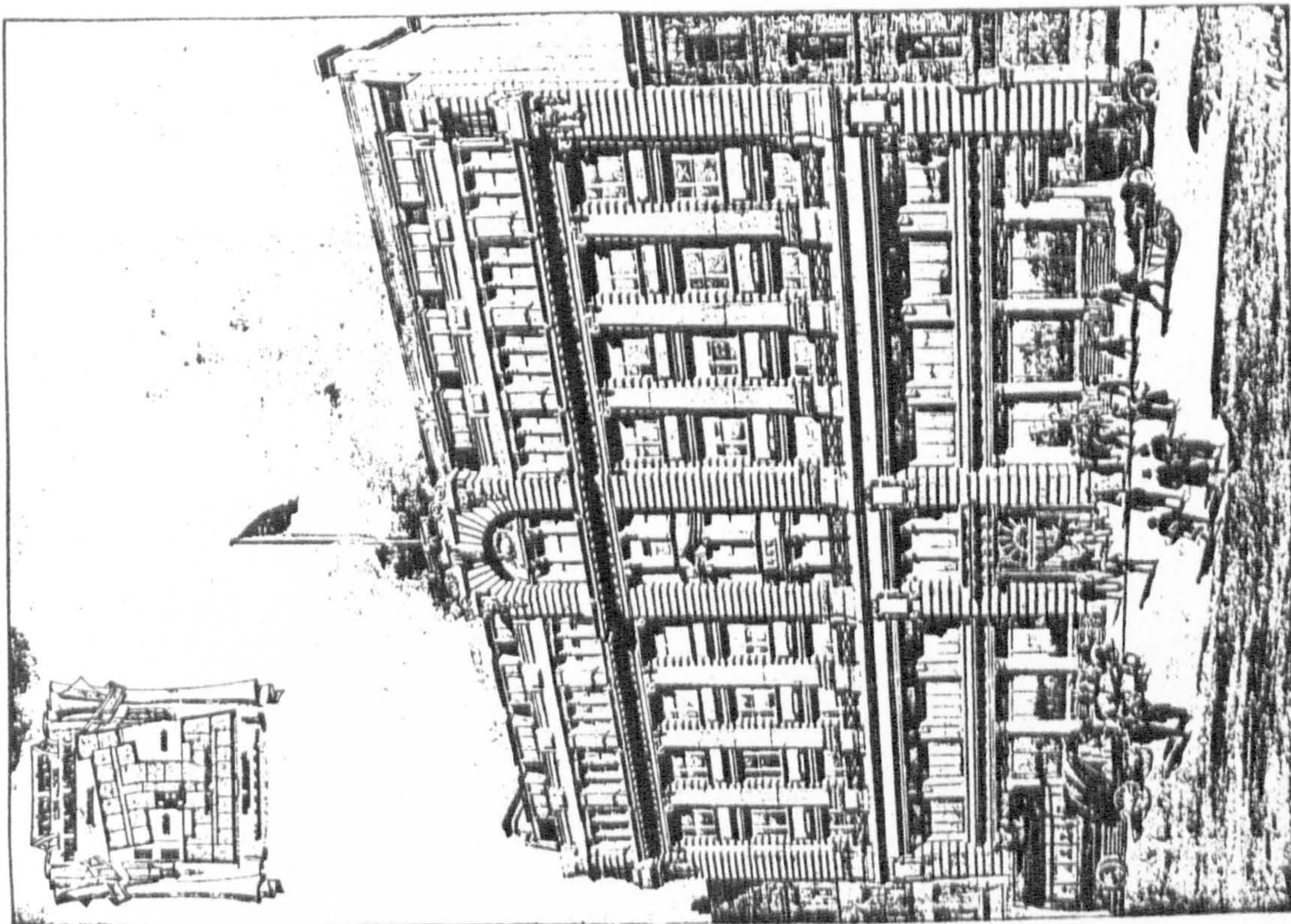
9-47

REGENT STREET OFFICE, 1907

LAND REGISTRY TRUSTEES OFFICE, Westminster, 1917

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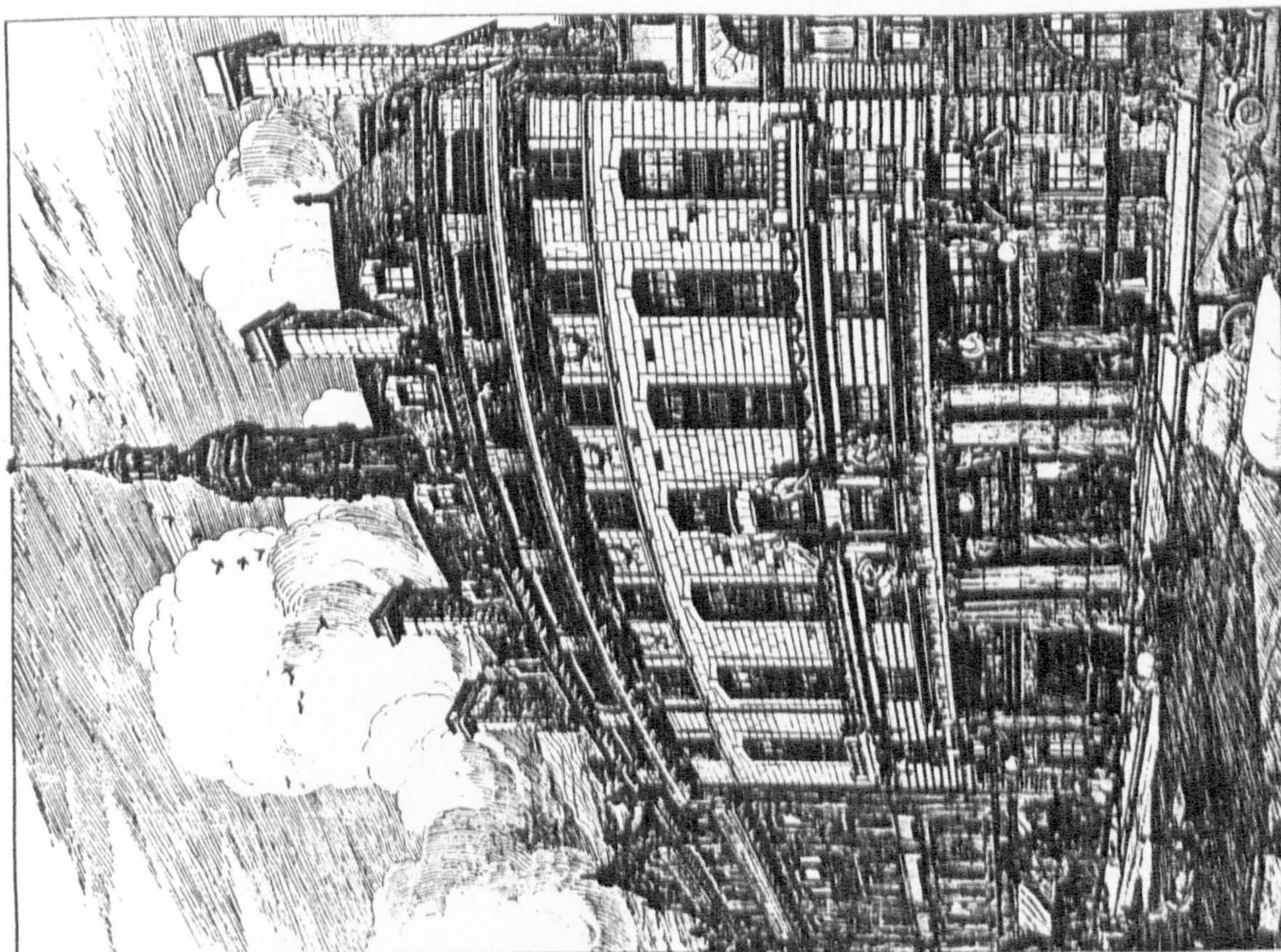


Nos. CCXCVI.—CCCL. HIGH HOLBORN.—MR. M. E. COLLINS, F.R.I.B.A., ARCHT.

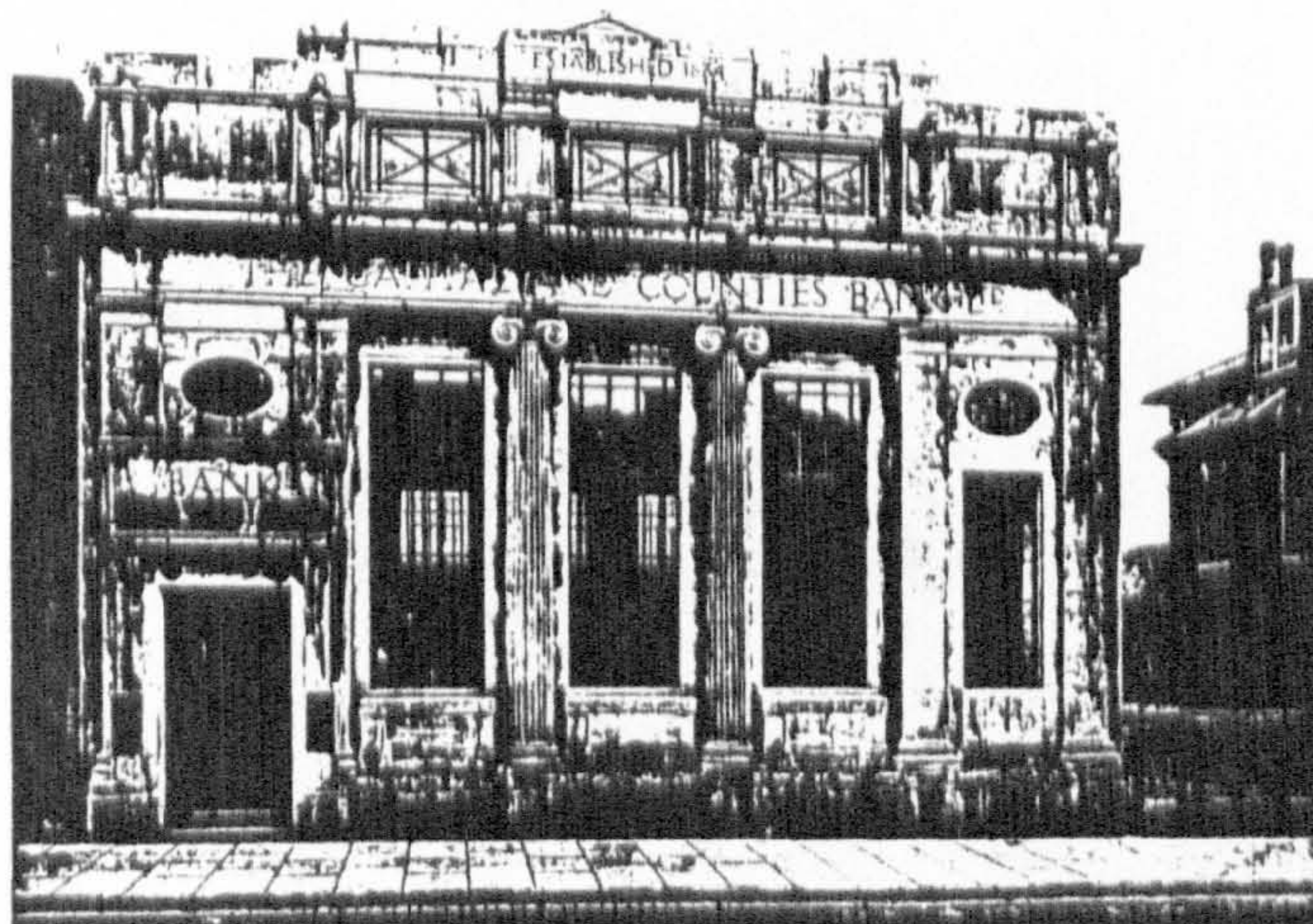
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296-302 HIGH HOLBORN, Westminster, 1914
GENERAL ASSURANCE BUILDING, Westminster, 1909

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GENERAL ACCIDENT FIRE & LIFE ASSURANCE CORPORATION LTD. NEW PREMISES - ALDWINCH LONDON WC
JOHN JAMES BURNET, ARCHA FRIBA, ARCHT



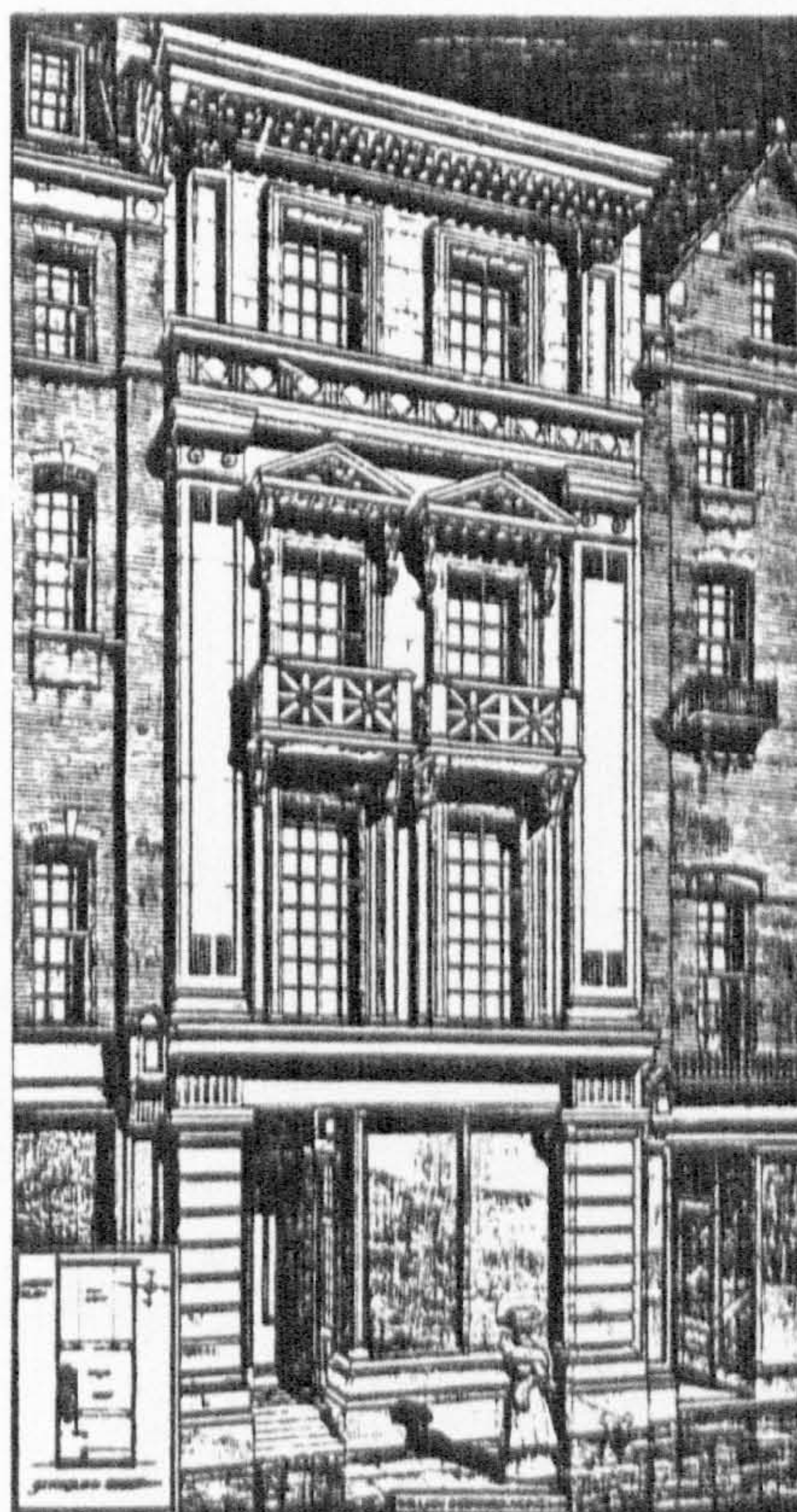
CURRENT ARCHITECTURE SERIES XL. XI—CAPITAL AND COUNTIES BANK, ST. ALBANS.
E. DWYNTWYD BAUFY, R.A., A.R.I.B.A., ARCHITECT.

Photo: R. L. Harbison.

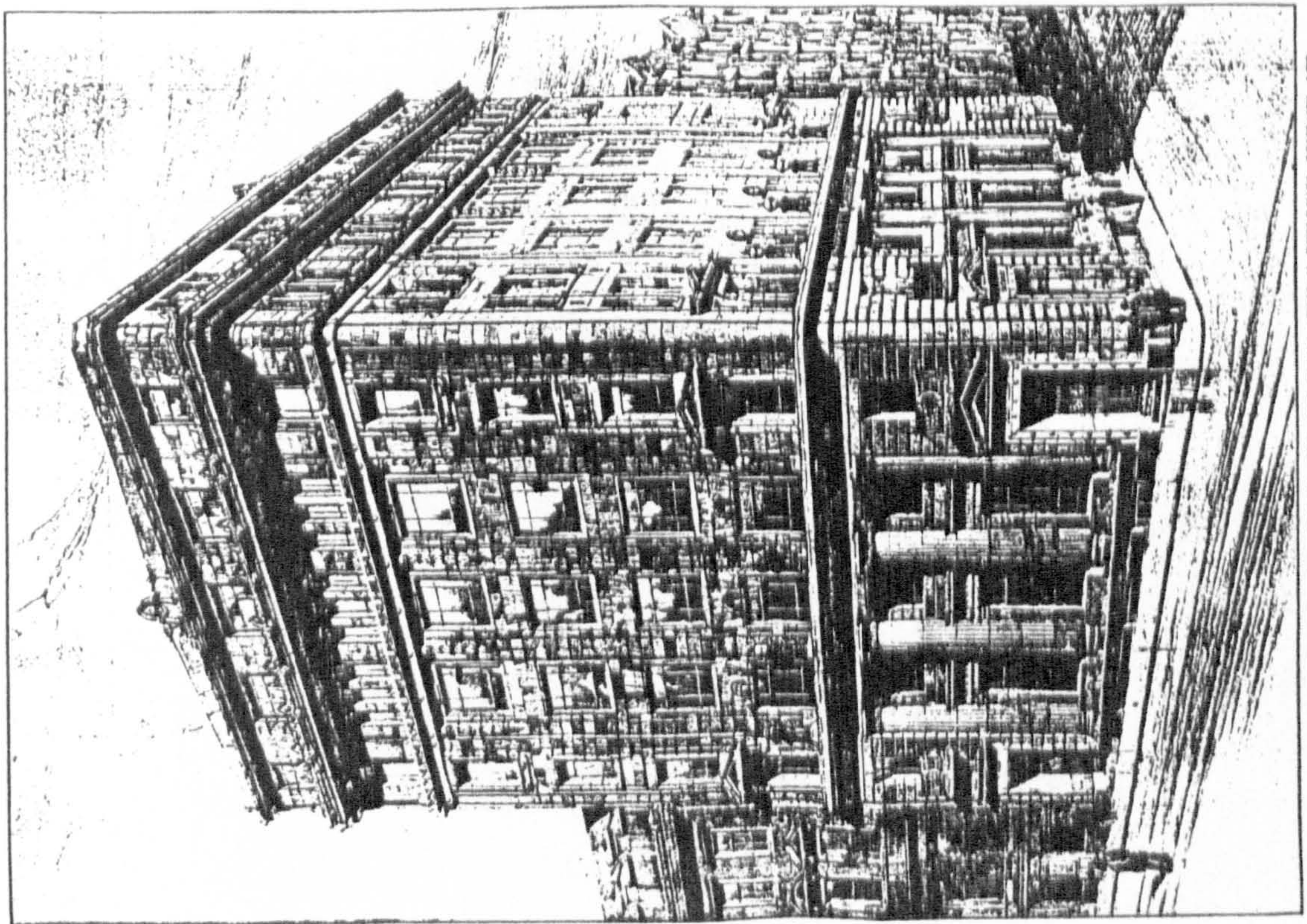
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CAPITAL AND COUNTIES BANK, St. Albans, 1915
153 GREAT PORTLAND STREET, Westminster, 1914

9-52



NO. XLIII. GREAT PORTLAND STREET, LONDON, W.
MORRIS WILLIAM and EDWARD A. HUNT, F.F.R.I.B.A., ARCHITECTS.

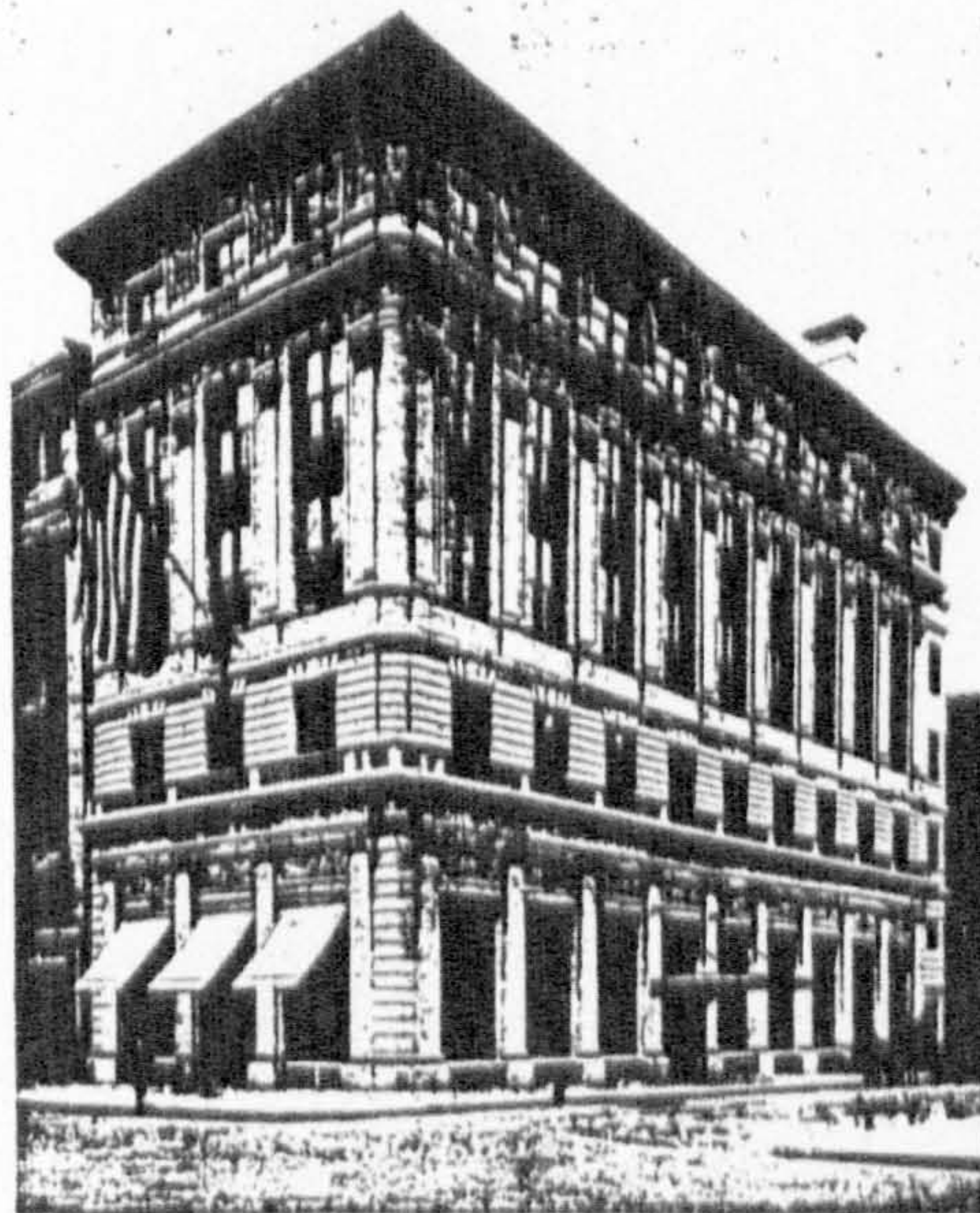


WEST AFRICA HOUSE, WATER STREET, LIVERPOOL, FOR THE WEST AFRICAN BUILDINGS COMPANY, LTD.
Messrs. BRIDGE, WOLFENDEN and TROSBELL, F.F.I.R.A., Architects

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WEST AFRICA HOUSE, Liverpool, 1914
BLACK, STARR AND FROST BUILDING, New York, 190-

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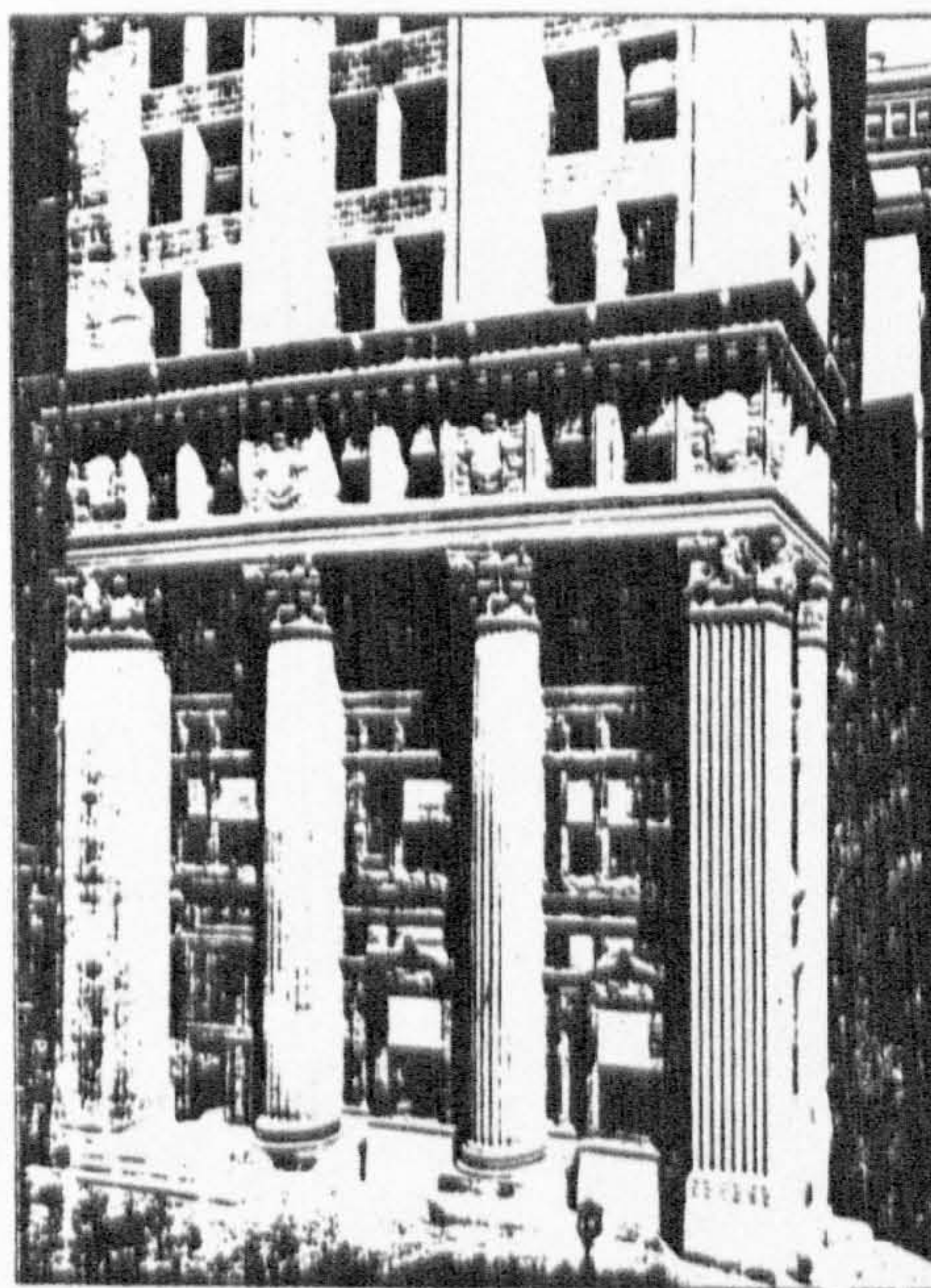


The Black, Starr and Frost Building, New York. Messrs. Cassin & Harrison, Architects.

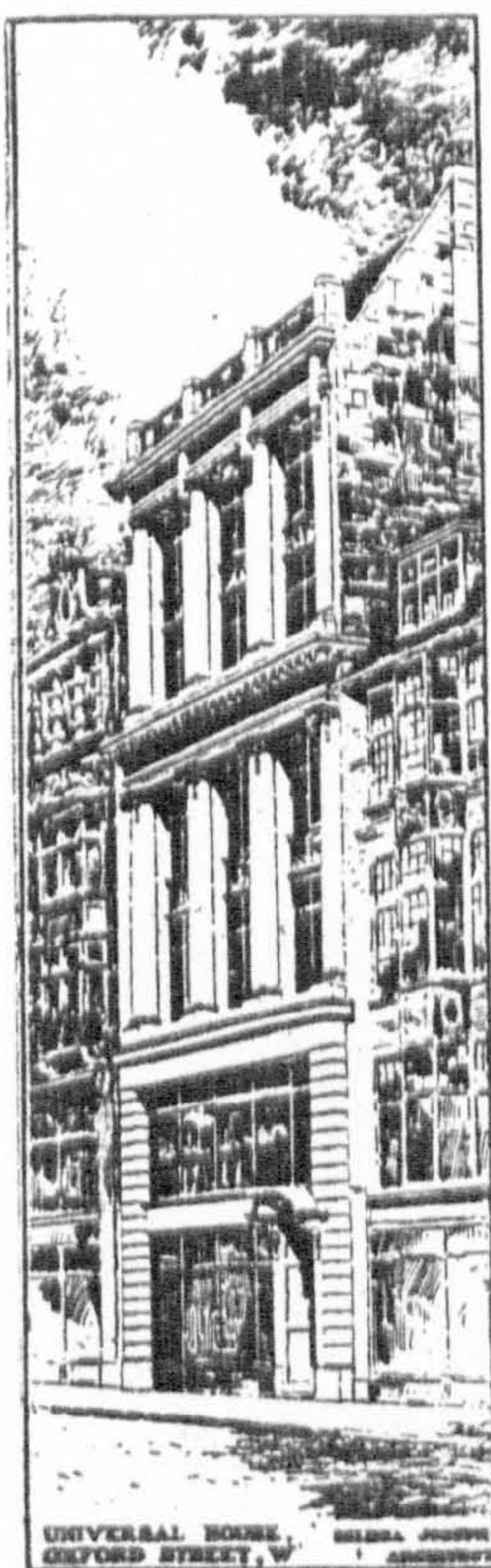


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PHOENIX ASSURANCE BUILDING, Glasgow, 1913
KNICKERBOCKER TRUST BUILDING, New York, 190-
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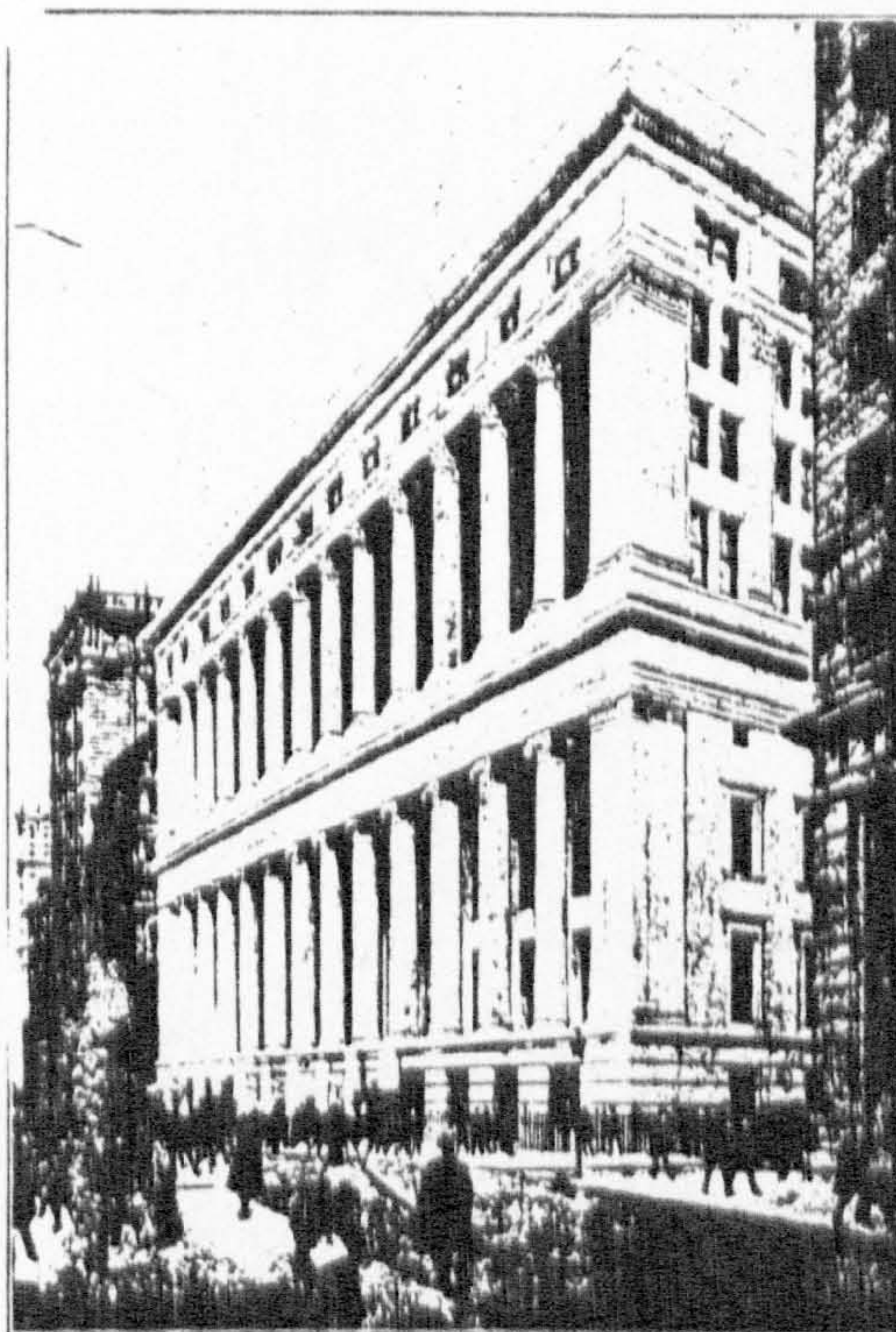


KNICKERBOCKER TRUST BUILDING, BROOKLYN, N.Y. 1909. MARY HEAL AND WHITE, ARCHITECTS.

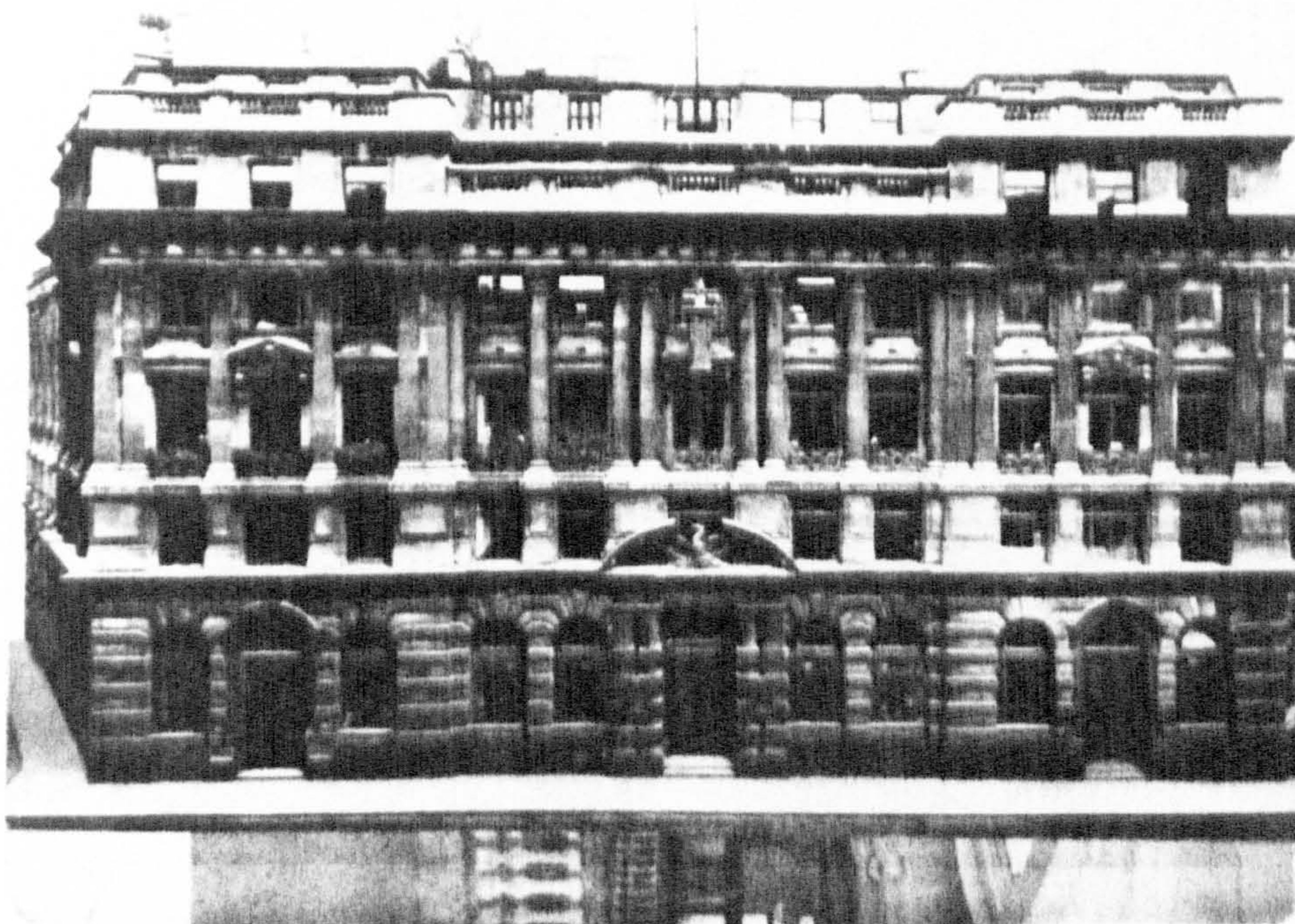


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UNIVERSAL HOUSE, Westminster, 1915
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THE NATIONAL CITY BANK, NEW YORK CITY, AS ALTERED BY
 MCMIM, MEAD, AND WHITE, ARCHITECTS.

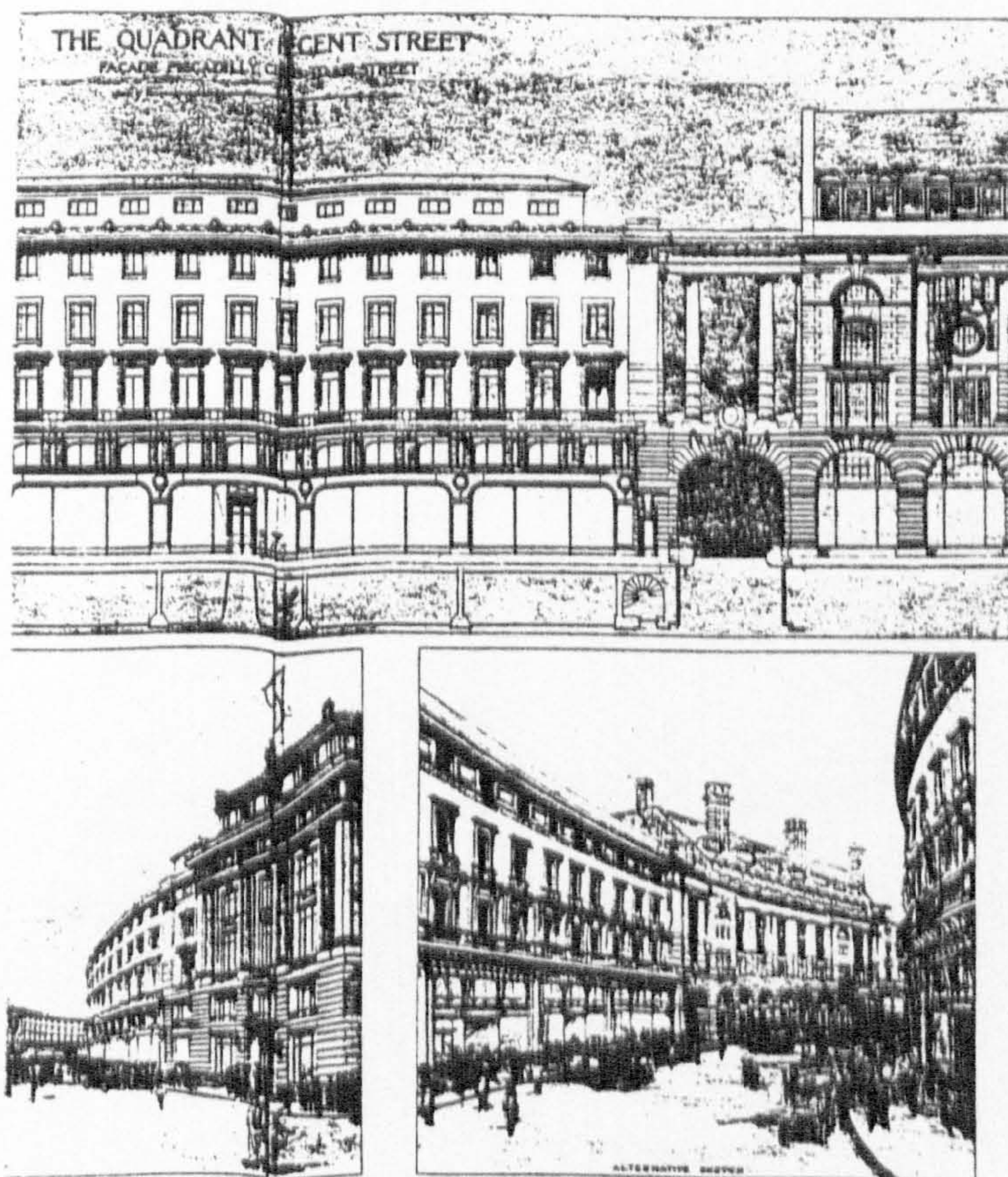


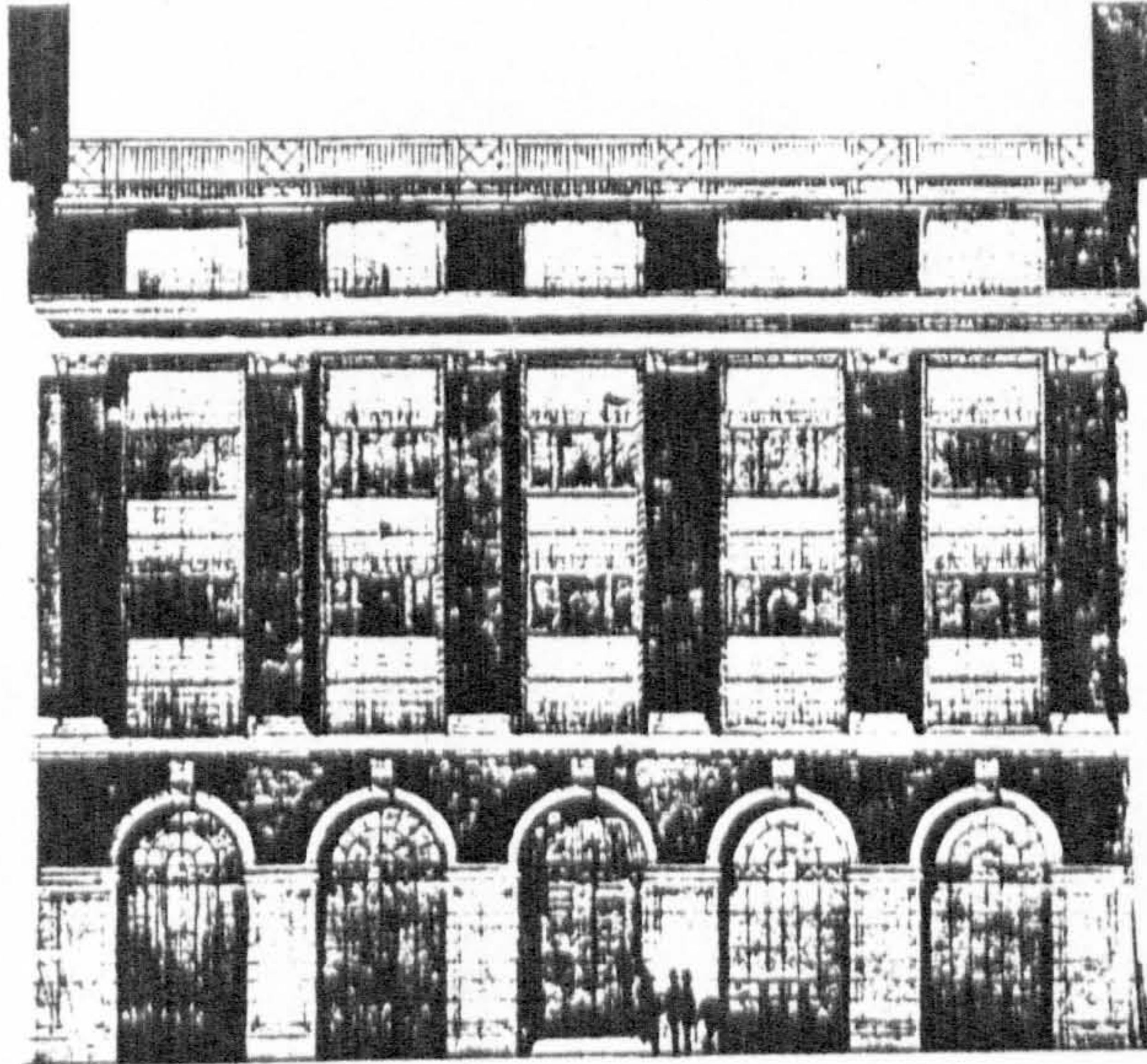
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PHOENIX HOUSE, City, 1914

REGENT STREET COMPETITION DESIGN, 1912

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Q.N. 1915.

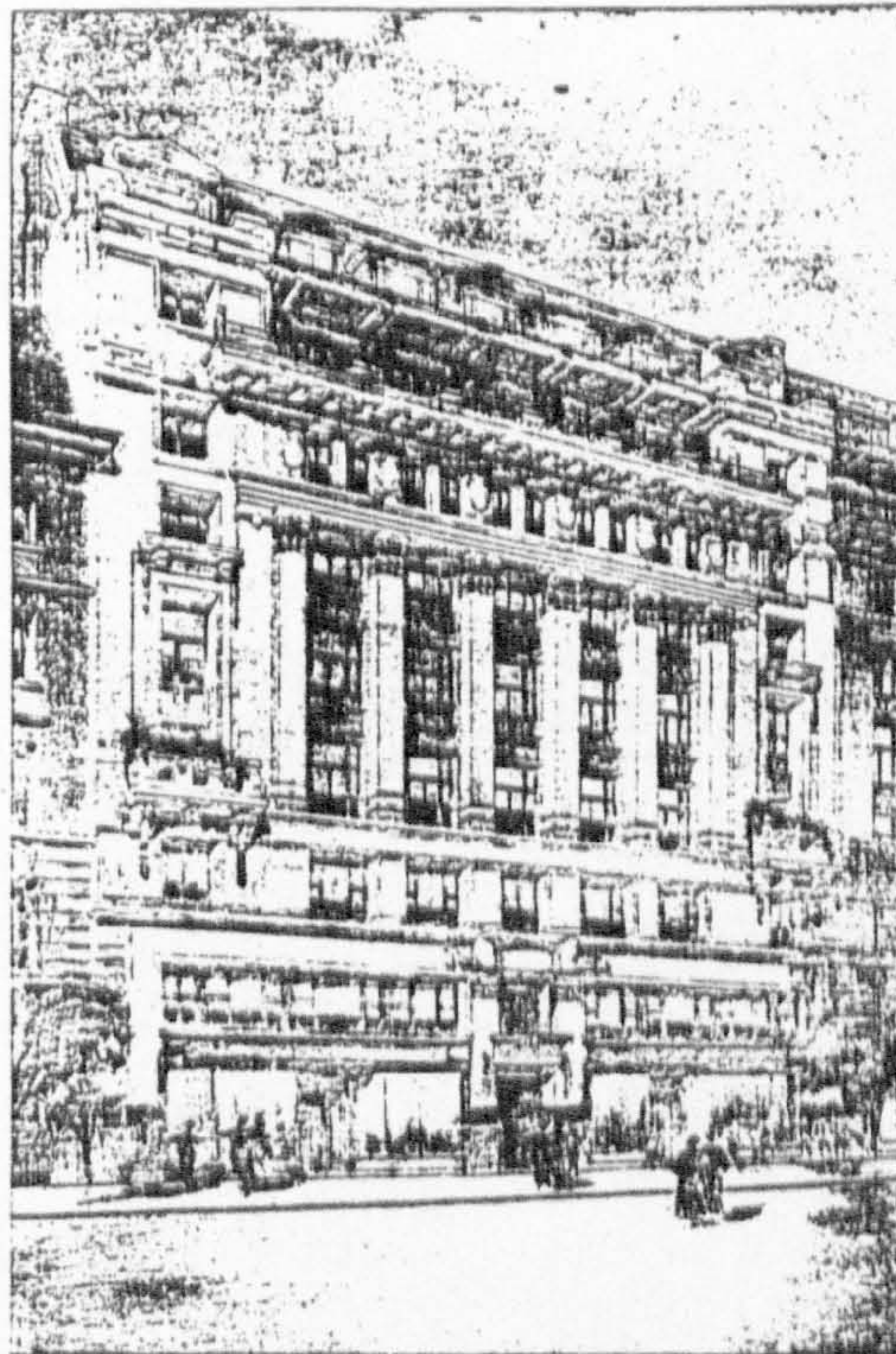
ERNEST NEWTON A.R.A.
ARCHITECT.
40, MARK LANE, LONDON
E.C. 3.

BANK, LOMBARD-STREET, E.C.
MR. ERNEST NEWTON, A.R.A., P.R.I.B.A., ARCHITECT.

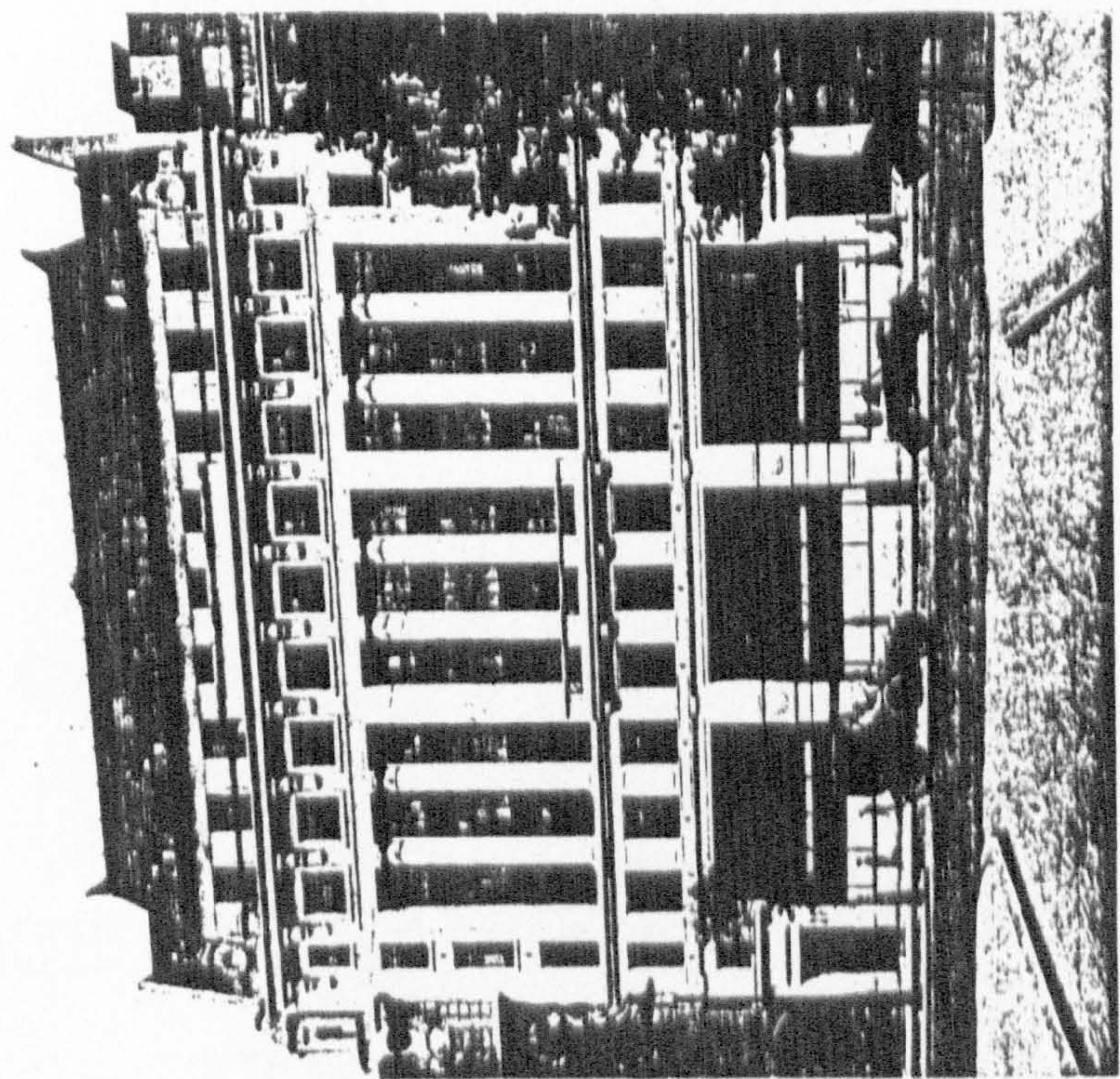
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MARTINS BANK, City, 1915
CANADA HOUSE, Westminster, 1915

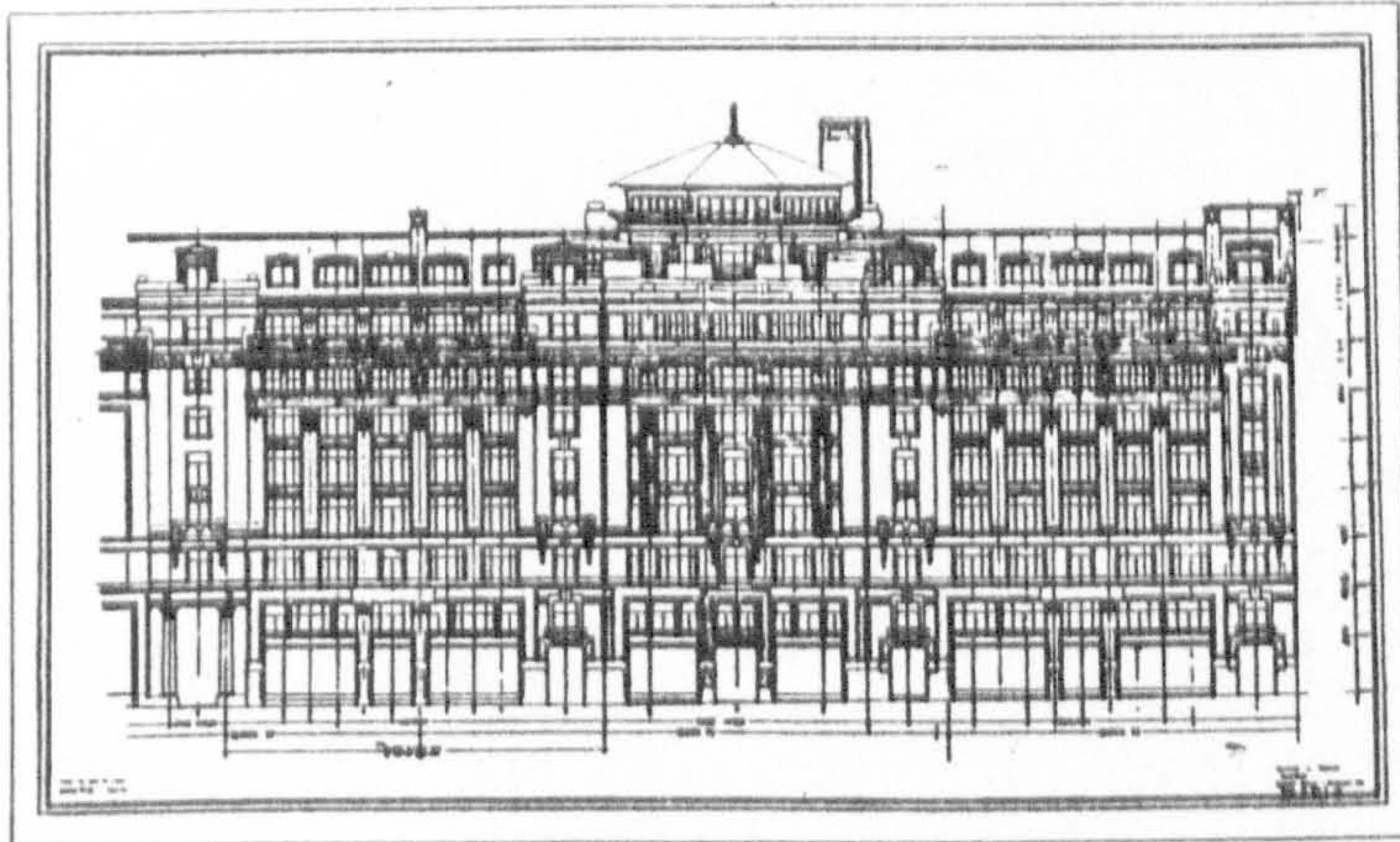
9-64



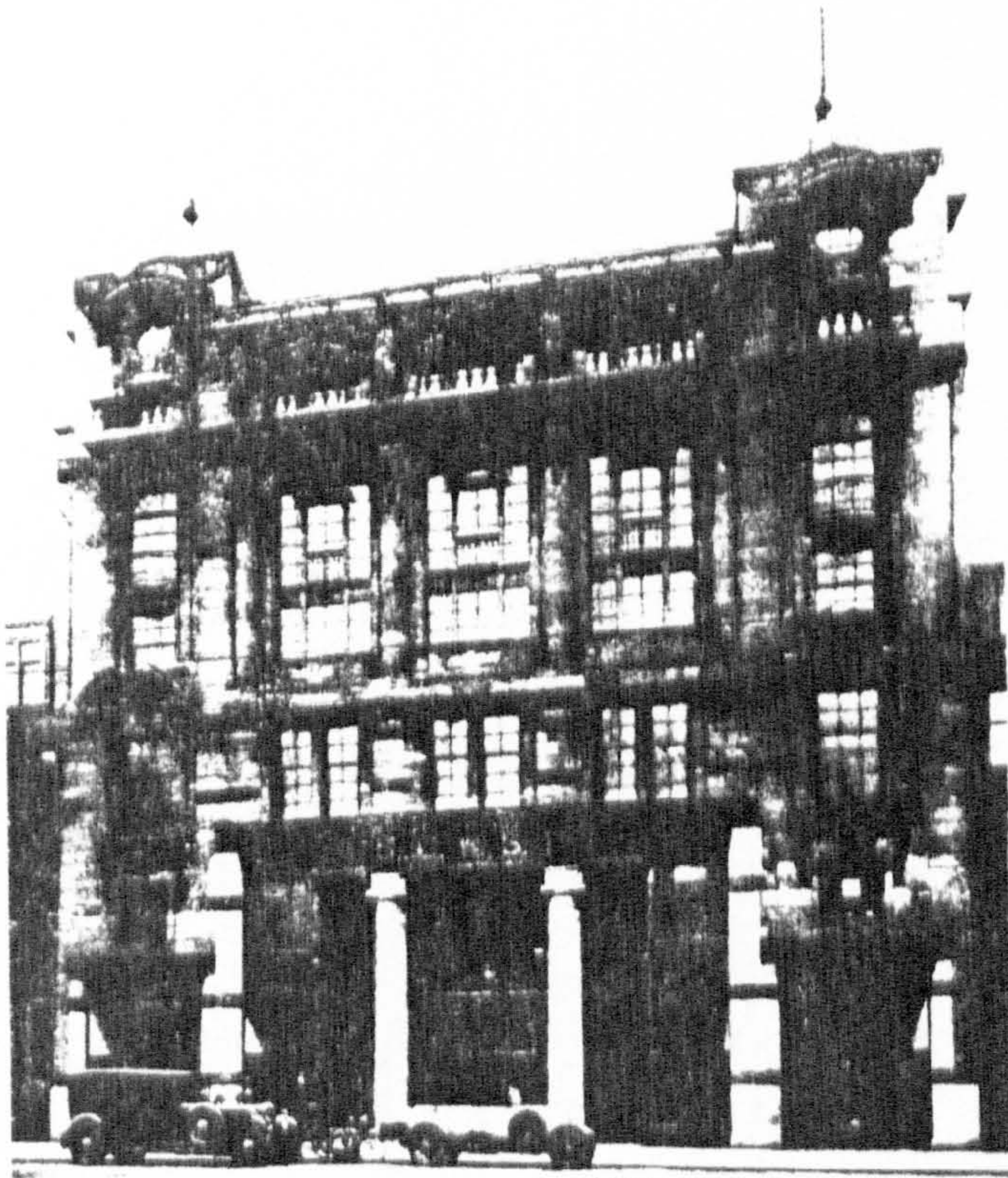
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Trehearne and Norman, Architects



Current Architecture. 124.—Shell Corner, Kingsway, London : Elevations
Trehearne and Norman, Architects



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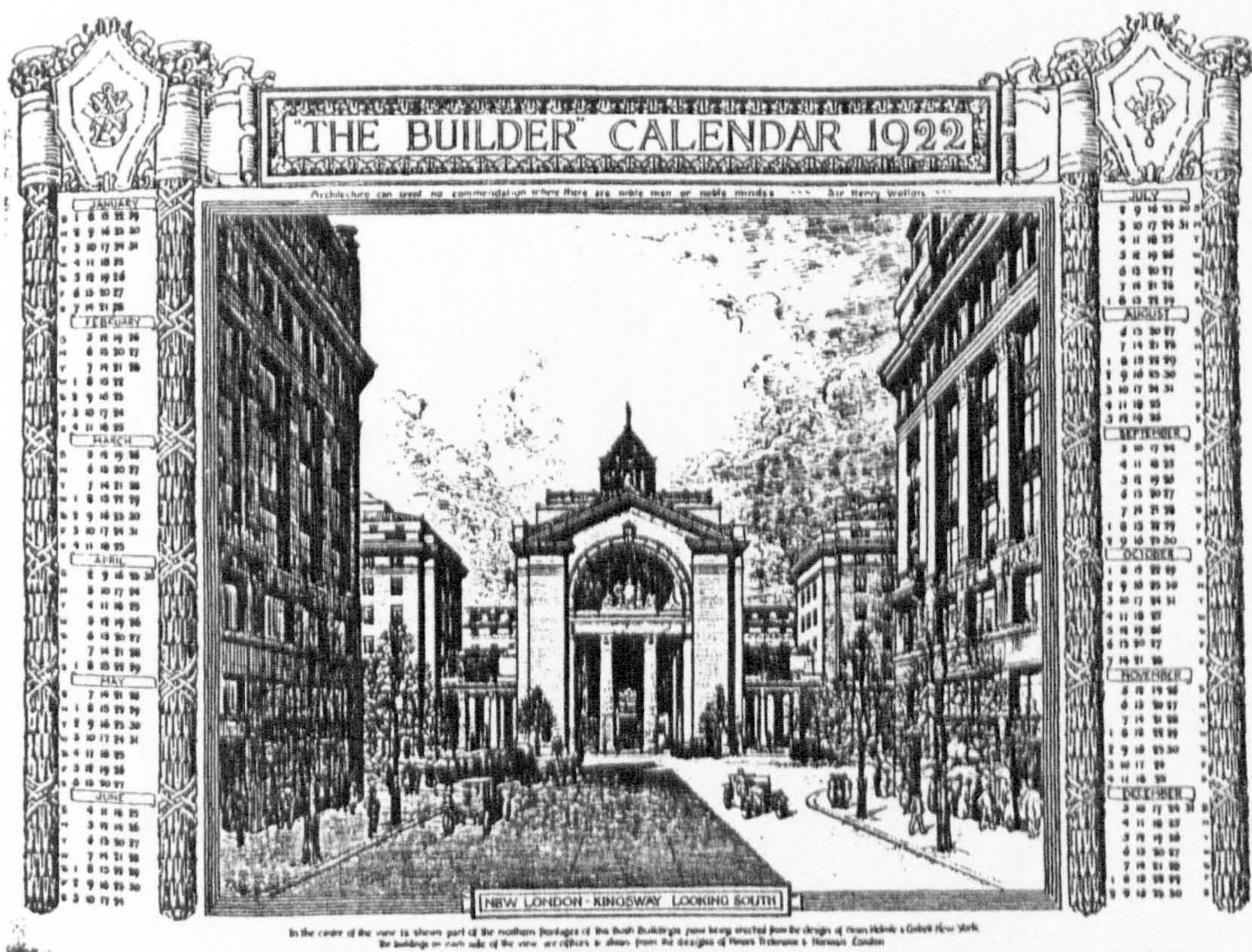




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NORTHWEST CORNER KINGSWAY AND ALDWYCH
BUSH HOUSE AND KINGSWAY TERMINATION, Westminster, 1922

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APPENDICES

APPENDIX 1
CITY PROPERTY VALUE

NOTE: Data in parentheses () is calculated. All other data is directly from source. Calculated purchase price is based on 27½ year rent equivalent.

Year	Property Location	Size	Price Per Annum	Equivalent Purchase Price	Price Per Acre	Source
1852	Cornhill Street			£32,000	£400,000	B. 8 May 1852:303
1853	Finch Lane	3,600SF	£1,300pa		£520,000	B. 3 Sept. 1853:567
1855	Bank St. Australia Threadneedle Street	3,774SF	£1,300pa		£448,000	B. 17 Feb. 1855:78
1855	Bannister's Threadneedle Street	775SF	£268		£450,000	B. 7 Mar. 1855:97
1855	Imperial Ins. Co. Threadneedle Street	3,000SF	Freehold	£40,000	£600,000	Ibid.
1855	County Fire Office Cornhill	4,320SF	£1,200		£470,000	Ibid.
1855	Royal Exchange Building	4,000- 5,000SF	£10,000	£275,000	(£2,750,000)	Ibid.
1855	London and Provincial Law Life Fleet Street	1,980SF	£84	(£2,310)	(£51,333)	B. 6 Oct. 1855:474
1864	Auction Mart	5,800SF	Freehold	£115,250	(£871,200)	B. 26 Mar. 1864:228
1864	Colonial Ins. Co. Lombard Street	1,080SF	Freehold	(£39,960)	(£1,611,720)	Ibid.
1864	London & Middlesex Bank Finch Lane	680SF	£500	(£20,400)	(£1,306,800)	Ibid.
1864	Mercantile & Exchange Bank Lombard Street	2,160SF		£40,000	(£806,600)	B. 8 Oct. 1864:748
1864	Old Broad Street	3,312SF	£2,380	(£65,450)	(£860,800)	COCO.

<u>Year</u>	<u>Property Location</u>	<u>Size</u>	<u>Price Per Annum</u>	<u>Equivalent Purchase Price</u>	<u>Price Per Acre</u>	<u>Source</u>
1864	Bishopsgate	25,000SF	£4,000	(£110,000)	(£191,700)	COCO.
1866	Clements Lane	900SF	£600	(£24,800)	(£1,197,900)	COCO.
1866	City Offices Co. Lombard Street	(11,200SF)	£6,000+ Premium	(£235,000)	(£914,400)	B. 27 Jan. 1866:70
1866	City of London Real Property Co. Mark Lane		£2,700			B. 16 June 1866:456
1870	Queen Victoria Street and Poultry	2,352SF	£2,400	(£66,000)	(£1,222,400)	B. 30 Apr. 1870:353
1872	Gresham Life Poultry	2,293SF	Freehold	£46,105	(£875,900)	B. 13 July 1872:553
1874	Threadneedle Street	2,200SF	Freehold	£32,050	£640,000	B. 6 June 1874:440
1874	St. Mary at Hill	3,600SF	Freehold	£15,250	£184,500	B. 22 Aug. 1874:718
1875	Threadneedle and Bishopsgate	3,000SF	£2,600		£775,000	B. 18 Sept. 1875:851
1877	Moorgate and London Wall	5,400SF	£2,350	(£64,600)	(£521,300)	B. 7 July 1877:695
1877	Cheapside	4,200SF	£2,300		£600,000	Ibid.
1878	Cornhill				£1,700,000	B. 6 Apr. 1878:364
1881	Eastcheap	1,685SF	£1,200	(33,000)	(£853,100)	B. 17 Dec. 1881:775
1882	Cornhill		Freehold	£25,050	(£1,437,500)	B. 20 May 1882:629
1886	Carter Lane	850SF	£8,350		£433,000	B. 29 May 1886:778
1899	Threadneedle Street			£350,000	£1,982,000	B. 17B6

<u>Year</u>	<u>Property Location</u>	<u>Size</u>	<u>Equivalent</u>		<u>Source</u>
			<u>Price Per Annum</u>	<u>Purchase Price</u>	
ca. 1900	Fenchurch Street			(£304,900)	Royal Insurance Co. Archive
1901	Lombard Street	1,000SF		(£51,650)	Ibid.
1904	Cheapside and Paternoster Row	945SF	£1,150	(£34,500)	B. 50B6
1909	Near Bank			(£3,049,200)	B. 20 Mar. 2909:336
1910	Near Stock Exchange			(Up to £4,356,000)	B. 5 Mar. 1910:251

COMPARATIVE CITY PROPERTY VALUES

Source: Worshipful Company of Skinners Property Books

<u>Property</u>	<u>ca. 1864</u>	<u>ca. 1876</u>	<u>ca. 1880</u>
Old Swan Alley	£260 per annum	£1,025 per annum	
151 Cannon Street	£100	£250	
153 Cannon Street	£85	£225	
Gracechurch Street	£280	£1,100	
119 Bishopsgate	£33	£90	
124/125 Bishopsgate	£36	£120	
49 Cannon Street	£40	£230	£560 per annum
45 Cannon Street	£45	£220	
47 Cannon Street	£130	£160	£590
20 Watling Street	£80	£250	£382
77 Watling Street	£60	£260	£270
106 Cheapside	£220	£300	£525

APPENDIX 2
BUILDING HEIGHT IN THE CITY OF LONDON

NOTE: All information from The Builder.
Floors in Mansard roofs counted as
full floors.

<u>Year</u>	<u>No. of Buildings Published With Heights Noted</u>	<u>Heights</u>	<u>Average Height</u>
1843	2	3;3	3
1844	0		
1845	0		
1846	0		
1847	0		
1848	1	3	3
1849	0		
1850	0		
1851	0		
1852	1	4	4
1853	1	4	4
1854	1	4	4
1855	3	4;4;5	4.33
1856	1	6	6
1857	3	4;5;5	4.66
1858	2	4;5	4.5
1859	0		
1860	2	4;4	4
1861	1	4	4
1862	2	4;5	4.5
1863	2	4;5	4.5
1864	4	4;4;5;5	4.5
1865	3	4;4;5	4.3
1866	1	5	5
1867	0		
1868	0		
1869	1	4	4
1870	1	4	4
1871	5	4;4;5;5;6	4.8
1872	2	4;5	4.5
1873	7	4;4;4;4;5;5;5	4.42
1874	4	4;4;5;5	4.5
1875	5	4;4;4;5;5	4.4
1876	5	4;4;5;5;5	5
1877	4	5;5;5;5	5
1878	2	4;5	4.5
1879	2	4;5	4.5
1880	6	3;5;5;6;6;7	5.33
1881	1	5	5
1882	0		
1883	2	5;6	5.5
1884	2	4;6	5
1885	2	4;6	5
1886	1	4	4

<u>Year</u>	<u>No. of Buildings Published With Heights Noted</u>	<u>Heights</u>	<u>Average Height</u>
1887	1	6	6
1888	3	5;6;6	5.66
1889	0		
1890	0		
1891	1	4	4
1892	1	5	5
1893	1	5	5
1894	2	4;5	4.5
1895	2	4;5	4.5
1896	2	5;7	6
1897	1	6	6
1898	0		
1899	1	4	4
1900	1	6	6
1901	1	3	3
1902	2	5;5	5
1903	2	4;5	4.5
1904	2	5;6	5.5
1905	0		
1906	1	4	4
1907	4	5;6;6;6	5.75
1908	0		
1909	1	7	7
1910	0		
1911	2	6;6	6
1912	5	5;5;7;7;8	6.4
1913	3	6;6;8	6.66
1914	0		
1915	0		

AVERAGES

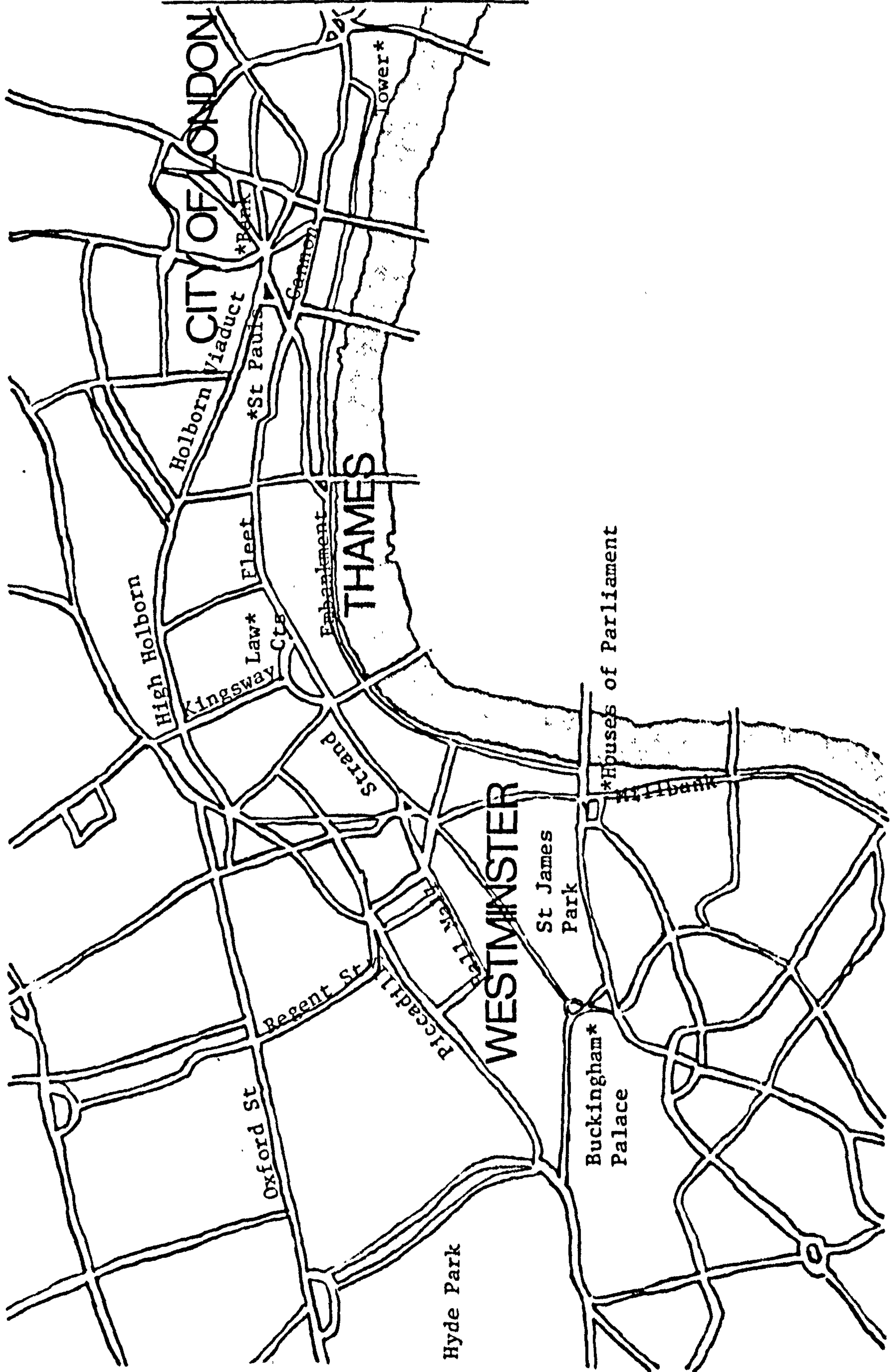
Early Victorian:		
1843 to 1854:	6	3.5
Mid-Victorian		
1855 to 1879:	62	4.59
Late Victorian		
1880 to 1899:	29	5.14
Early Twentieth Century		
1900 to 1915:	24	5.71

APPENDIX 3
FLOOR AREA RATIOS IN THE CITY OF LONDON

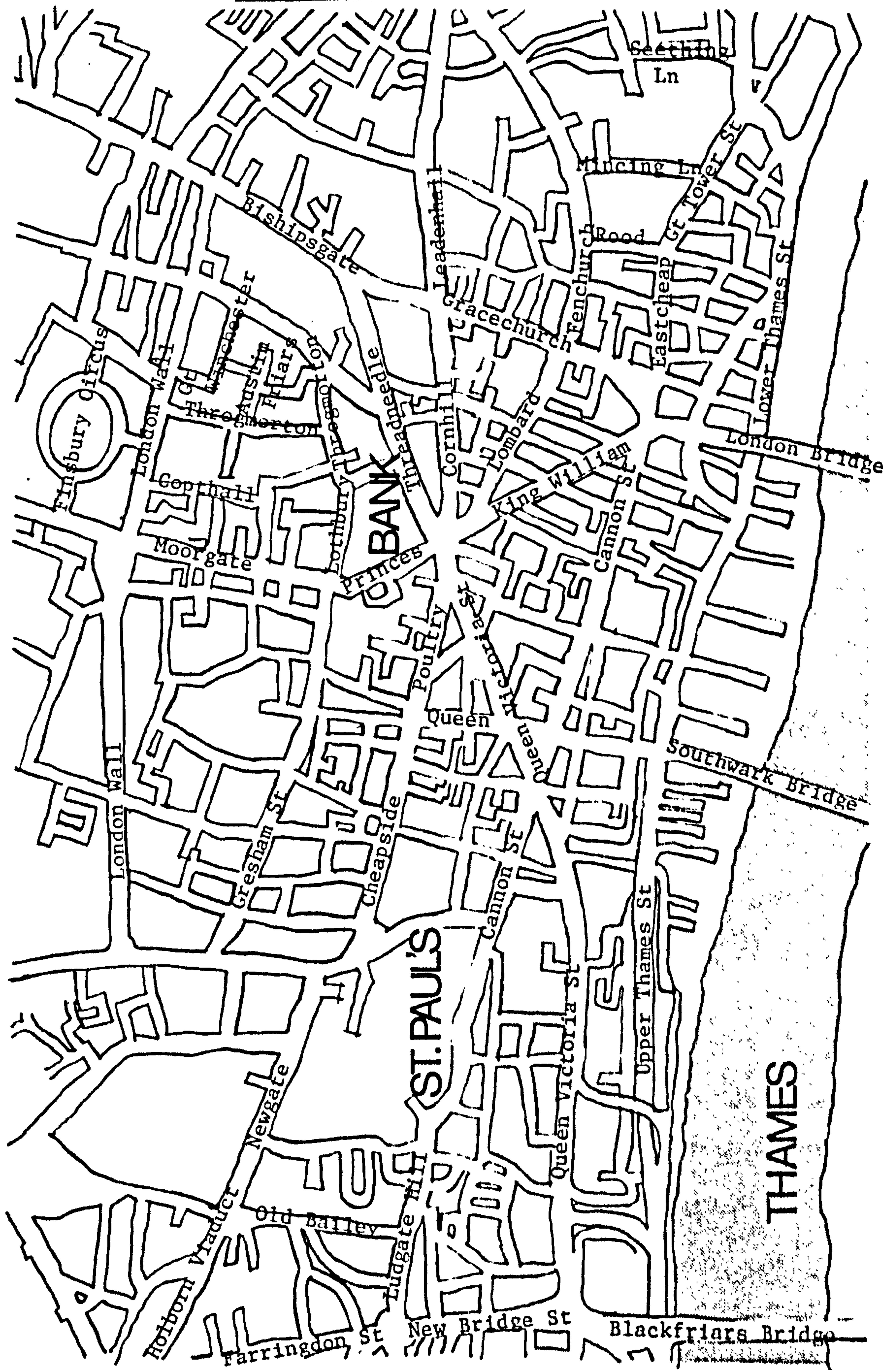
<u>Building</u>	<u>Year</u>	<u>Architect</u>	<u>Site Area</u>	<u>Floor Areas Above Ground</u>	<u>Floor Area Ratio (SF Floor/SF Site)</u>
Colonial Chambers	1857	E. I'Anson	6,600SF	G: 5,560SF 1: 5,560SF 2: 5,560SF 3: 5,560SF	3.35
Gresham House	18--	?	47,900SF	G: 47,900SF 1: 38,700SF 2: 38,700SF 3: 38,700SF	3.42
Palmerston Buildings	1867	F&H Francis	31,100SF	G: 31,000SF 1: 24,250SF 2: 24,250SF 3: 24,250SF	3.34
37-39 Lombard Street	1867	F&H Francis	11,200SF	G: 11,200SF 1: 9,200SF 2: 9,200SF 3: 9,200SF 4: 8,500SF	4.22
9 Mincing Lane	186-	J. Whichcord	17,000SF	G: 17,000SF 1: 13,400SF 2: 13,400SF 3: 13,400SF 4: 3,600SF	3.58
Great Winchester Buildings	18--	?	36,000SF	G: 36,000SF 1: 31,150SF 2: 31,150SF 3: 31,150SF	3.59
New Zealand Chambers	1873	R.N. Shaw	8,100SF	LG: 8,100SF UG: 6,330SF 1: 6,330SF 2: 6,330SF 3: 6,330SF	4.12
Average					3.66

APPENDIX 4

MAP OF LONDON AND WESTMINSTER



APPENDIX 5
MAP OF CITY OF LONDON



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